

MANUFACTURERS' RECORD

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RICHARD H. EDMONDS,
Editor and General Manager.

EDWARD INGLE, Managing Editor.

THOMAS P. GRASTY,
General Staff Correspondent.

Branch Offices:

New York—52 Broadway.
Boston—170 Summer Street.
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St. Louis—1023 Century Building.

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BALTIMORE, OCTOBER 24, 1907.

Mr. I. A. Cottingham, engineer main-
tenance of way of the Houston & Texas
Central Railroad, Houston, Texas, in
reply to a query about plans of his
company for a tapline, writes to the
MANUFACTURERS' RECORD:

You can be assured that we do not con-
template building a road from Waller to
Sunnyside, or any other place in Texas. I
would be glad to be able to say to you that
we have decided upon a plan to tear up
about 1000 miles of what we have before the
next Legislature swoops down upon us.

And yet there are actually some folks
who really believe that railroad develop-
ment has not been disastrously affected
by legislation.

LEADERS IN EUROPE FOR THE SOUTH.

After swinging around the circle from
New York to New Orleans, to Houston,
Galveston, St. Louis, Chicago, Toronto,
and back to New York, the majority of
the foreign cotton spinners have sailed
for home. The MANUFACTURERS' REC-
ORD is able to say that they carry with
them the most pleasant recollections of
their journey, and that they were
amazed at the potentialities of the
South, both for cotton production and
cotton manufacturing. The royal re-
ception that they received from the day
they left Washington until they ended
their journey in New York was a de-
light and a surprise. They have gone
home with pleasant thought of the
South and greatly impressed with its
immeasurable resources for the develop-
ment not only of the textile business in
all branches, but for general develop-

ment in all lines of industry. Hence-
forth the South will have in the textile
circles of Europe over a hundred leaders
thoroughly posted as to the advantages
of this section, loaded with a vast
amount of data which they have taken
home to digest, and the good which
must inevitably come will be far greater
than those who were somewhat skept-
tical at one time about the trip had
deemed possible. The MANUFACTURERS'
RECORD is also able to say that some, at
least, of these foreign cotton operators,
representing in the aggregate, as they
do, an industry which pays to the South
\$500,000,000 a year for cotton, an indus-
try which in all of its ramifications in
Europe must represent investments in
cotton mills and cognate industries of
probably \$2,000,000,000, will be invest-
ors in cotton lands and some will be in-
vestors in the building of cotton mills
in the South. Just how soon their plans
may be formulated it is not yet possible
to say, but as an outcome of this trip
we are assured there will in the not dis-
tant future be some very large invest-
ments of European capital in the South.

THE CLOUDS WILL ROLL BY.

And still the sun is shining. And still
85,000,000 people are being clothed and
fed and are doing their accustomed
work. Still the tramp of a mighty army
of a million workers is annually pour-
ing into our country, and hundreds
of thousands from other sections of the
United States are annually turning
their footsteps toward the great South-
west, and many into the Central South.
The world moves. Human activities
know no let-up. The farmers of the
country will this year receive \$7,000,-
000,000 for their products, or about nine
times the total national banking capital
of the United States; almost one-half
as much as the total investment in all
the railroads of the country. Never be-
fore in the history of America were the
agricultural conditions of the country
so sound and solid; never before were
the farmers of the South and the West
alike so nearly out of debt, and with a
total value of farm products to their
credit so staggering in amount as to be
almost beyond comprehension. Contrast
the \$7,000,000,000 which will this year
be paid to American farmers with the
total for preceding years. In 1890 the
total value of farm products was
\$2,466,000,000, or but a little more than
one-third of the value this year. Even
seven years ago, or in 1900, the total
was \$4,717,000,000, while this year the
aggregate of \$7,000,000,000 shows a
gain of \$2,300,000,000 as compared with
1900, and is almost as great as the total
value of farm products in 1890.

How can a country materially suffer
in its business interests with such a

solid foundation for marvelous pros-
perity and business expansion? New
York is at present the storm-center of a
bad financial condition, due in part to
the rottenness of the methods of some
financial operators in that great world-
center, in part to destruction of confi-
dence by ceaseless agitation and legisla-
tion against railroads and other corpo-
rations. It is true that the deprecia-
tion in securities has been enormous.
It is true that thousands have lost their
all by having to sacrifice securities.
But these conditions do not, by any
means, change the fundamental sound-
ness of American business conditions.
The man who has been forced by this
financial storm to sacrifice his securi-
ties for far less than their intrinsic
value has transferred to the purchaser
a property which, when the storm is
over, must inevitably advance commensurate with the marvelous natural re-
sources and development of the coun-
try. Take the conditions of 1893, with
our disorganized currency system, with
the world uncertain as to the future of
our monetary standard, with the silver
issue in the balance, and no man able
to predict the outcome, and contrast
that situation with the conditions to-
day, and we can see something of the
difference—a difference so great as to
be really startling. Then the farmers
of the West and South were burdened
with debt. Then their agricultural
products were at an exceedingly un-
profitable point. Then cotton, wheat
and corn and cattle were selling at less
than the cost of raising. Since that day
we have added from 20,000,000 to 25,-
000,000 people to our population. We
have doubled and in many cases trebled
and quadrupled the volume of business.
We have trebled the value of agricul-
tural products, and against the poverty
of the farmers of that year is the
abounding prosperity of today. Despite
these conditions some good securities
have fallen to as low a price as pre-
vailed in 1893, notwithstanding the vast
expansion in industry and population
and wealth. This is partly a case of
hysterics, and, as already stated, partly
an outcome of mismanagement in some
financial institutions, and, of course, to
some extent a distrust created by con-
stant agitation against railroads.

These things, however, are ephemeral
in their nature, and must pass away.
The country at heart is sound and solid
for abounding prosperity despite the
disorder which temporarily prevails in
Wall Street and the interests connected
therewith. The MANUFACTURERS' REC-

ORD does not by any means fail to appre-
ciate that in one sense Wall Street is
the financial center of the country and
that its disorders afflict the whole body,
but for some years the country at large
has been growing more and more inde-
pendent of Wall Street, and every year
better able to meet its own local busi-
ness problems without regard to Wall
Street operations. There is no need for
hysterics. The boundless possibilities
of a country of almost infinite resources
are before us. History affords nothing
comparable to the opportunities which
await the man of energy and activity in
this country. Instead of joining in the
hysterics of New York, let the business
people of the whole country turn with
greater energy than ever before to the
utilization of the magnificent opportuni-
ties which are before us, and the losses
in Wall Street, great as they have been,
will soon be forgotten in that mighty
sweep of prosperity which is ahead of
us. It may be delayed for a brief time,
but nothing can stop the onward march
of America's business activities.

BIG TASK FOR SOUTHERN LEGISLATURES.

Under the entirely inadequate and
misdescriptive title, the "Textile Con-
ference of the Cotton States," there was
a little gathering last week at Nash-
ville, Tenn., supposed to be a confer-
ence between textile manufacturers and
textile workers in the interest of chil-
dren and women in the industry. The
gathering was composed principally of
66 "delegates" from diverse bodies of
organized labor, such as the Hod Car-
riers' Union, the International Brother-
hood of Leather Workers on Horse
Goods, the United Mine Workers of
America, the Paperhangers' Union, the
Barkeepers' Union, etc., in all of which
women and children predominate as
workers, over the left; in fact, of almost
every phase of labor except textile
workers. Of these 66 "labor delegates"
to the "Textile Conference of the Cot-
ton States" three were from Florida
and three from Alabama, probably
under a delusion, and the 60 others were
from Tennessee, 34 of them being from
Nashville. Ten manufacturers present
were exclusively "representatives" of
the manufacturers of Tennessee. There
were present besides one Governor and
two ex-Governors, all three from Ten-
nessee, two professors from Nashville,
Tenn., one clergyman from Virginia, two
women from Louisiana, another wom-
an from Alabama, the latter probably
under a misapprehension, and one em-
ploye of a child-labor agitating body,
which was truly described as "a fair
representation of societies interested in
the suppression of the evils of child
and female labor." In fact, the whole "con-
ference" which adjourned sine die, but
with the understanding, nevertheless,

that, in spite of the usual fizzle, the Governor of Tennessee be requested to call a similar "conference" in some Southern city in 1910, provided the General Assembly of Tennessee adopts a resolution to that effect, was "a fair representation" of most of the promotional work of the child-labor agitation. A "fair representation," too, is the following specimen plank from the platform adopted by the "Textile Conference of the Cotton States":

That no female under 17 and no male under 19 be allowed to marry, and that an oath as to age be required at the issuance of the license.

Mr. Fahey saw no connection between the problem of child labor and the marriage laws. Mr. Andrews said that it was of the utmost importance. Women as girls came to his mills in short skirts, weakened from travail, with a child in her arms, asking employment. He favored the section.

Mr. Mathais of Clarksville favored a physical test of women contemplating marriage. The section was adopted.

Now get busy, Southern Legislatures that may be fools enough to pay any attention to any suggestion of a body that could let that sort of thing ooze to its surface. But, at the same time, why not provide for mental tests as well as physical tests of the males employed in promoting sociology in the country generally and "Southern" conferences in particular?

THE SOUTH WARNED AS TO IMMIGRATION.

Referring to the serious mistake in the amendments of the national immigration law in the last session of Congress, emphasized by the opinion of Attorney-General Bonaparte, and to the not unprecedented hoodwinking of representatives of the South in the legislation, the *Landmark* of Norfolk, Va., makes these eminently sane remarks:

We admit that we are not shedding tears over the trick ourselves. In the first place, we do not think the South is injured by not being able to "assist" immigration; and, in the second place, we think the Southern Senators and Representatives deserved what they got for voting blindly in favor of a measure which conferred so much arbitrary power unnecessarily upon the Federal Executive. They leaped before they looked, with the usual result.

It may be further suggested that the trick may result in injury to the South if representatives of the South in the National Legislature permit themselves to become victims of the trick, already in incubation, that would, under cover of an artificially developed unquestioning resentment against the first trick, use the South as a dump in immigration for the benefit of transatlantic steamship lines co-operating with foreign governments anxious to rid themselves of undesirable population, for the benefit of racial or religious schemers, or for the relief of such slum-ridden communities as New York.

Success of that trick would be disastrous to the South. It would check indefinitely the movement to the South of desirable population from other parts of the country which has attained the proportions of at least 200,000 persons annually. It would check, as has happened in other parts of the country, the healthy increase of population by birth. It does not seem to be generally known that, in spite of the balance against the South through inter-sectional immigration of at least 1,500,000 persons, and in spite of the vast preponderance of foreign immigration to other parts of the country, the population of the South increased between 1880 and 1900 from 16,300,000 to 23,500,000, or at the rate of more than 44 per cent., while the population in the rest of the country

increased from 33,855,000 to 52,495,000, or at the rate of 55 per cent. The South depended largely upon its own natural resources for its increase in population, while the rest of the country drew quite 10,000,000 persons from abroad. Without the additions through foreign immigration the increase in population in the rest of the country would have been at the rate only of about 26 per cent.

Reasons for migration from the South that might have prevailed 20 years ago no longer exist, and it is believed that the next decennial census will show a marked advance in the rate of increase of native stock there, provided no mistake is made by the South of rendering it possible for itself to be overrun by foreign population of the most undesirable character. The increase in native stock will be through birth or through the migration from other parts of the country, and with such an increase conditions will be such in the South that the best kind of foreign-born population, either direct from abroad or by way of other parts of the country, will be attracted to the South to swell its advance even beyond the advance made in other parts of the country before foreign immigration assumed its present proportions and menacing character, due to the fact that the mass of it is alien in every respect to the stocks which have entered into the making of the average American citizen.

FOOD FOR FOOLS.

We have received from the "International News Service" of New York city an offer to send us "at absolutely no cost" for the next six weeks special correspondence from New York, Washington, Paris and London. From the specimen correspondence submitted before we had opportunity to decline this generous offer, we judge that this six weeks' special service had particular reference to the maneuverings of some one, rather verdant, for the nomination for the Presidency in 1908 and to an effort to eliminate from consideration by the opposite party any New Yorker. In this connection it will be interesting to know what District Attorney Jerome of New York city will have to say to any newspaper incontinent enough to publish the characterization of him in the service released for publication October 19-20. Be that as it may, the nerve of the undertaking is displayed in a reference to Lemuel Ely Quigg as an "accelerator of public opinion" as follows:

While there can be no question of Mr. Quigg's shrewdness, he is by no means the marvelous "creator of a new idea" that some paper called him a few days ago. He was simply smart enough to apply an old game that politicians resort to in every campaign, and to give a twist thereto to make it suit his own purpose.

Exactly. And who is to be benefited by the acceleration of public opinion by way of the special six weeks' service at "absolutely no cost" of the "International News Service"?

Other food for the office cat browsing through our waste baskets comes in the shape of proof sheet of copy carefully prepared under the auspices of "Cosmographic," also of New York city, and dealing with special correspondence, too, from New York, Washington, Paris and London, together with rather indigestible matrices, also released for October 19 and 20. This is sent "at the rates prevailing in your locality for special matter of this character," and is in the interest, apparently, of the same political aspirant, who seems to have money, anyhow, as the one whose availability is the burden of the "In-

ternational News Service." The generous suggestion is made:

In case you do not care to use this matter do not return it, as it is of no value to me after the release dates. You are welcome to make any disposition of it you may see fit.

If the office cat refuses it, it may do to kindle the fire on a pinch.

It is amazing how general is the impression in certain quarters in New York city that the rest of the country, and particularly the political South, is teeming with individuals unequipped with eye-teeth.

UNABASHED.

Under the auspices of the National Civic Federation of New York city there is under way at Chicago this week "a national convention on combinations and trusts." It has not been announced what particular brand of public opinion is to be thereby "accelerated," nor is it known whether anybody has "guaranteed" any sum of money to make a success of the findings of the conference.

Mr. B. H. McFarland, secretary Houlika Drainage System, Aberdeen, Miss., in a letter to the MANUFACTURERS' RECORD says:

This section of Mississippi has taken up the drainage business to a considerable extent, and we will have 70 miles of canals in the course of two years, draining some 50,000 acres of very fertile land which cannot be cultivated without this system of ditching.

COTTON STATISTICALLY.

Synchronously with the ending of the tour of representatives of European cotton interests through the South has appeared the thirty-fourth annual edition of "Cotton Movement and Fluctuation," which Messrs. Latham, Alexander & Co., bankers and cotton commission merchants of New York, have so long and so faithfully prepared for the benefit of their customers and to the advantage of everybody interested in the many phases of cotton. This year's edition contains, besides the usual tables of receipts, stocks, exports, consumption, acreage, total visible supply and fluctuations for a series of years, some special articles, including a comprehensive letter from Ellison & Co. of Liverpool, the report of the Lancashire commission on cotton-growing in America, a survey of the world's cotton yield, an article on Egyptian cotton and the firm's own careful review of the past season. Indicative of the activity of that season is the statement by Ellison & Co. that there are now in operation in Great Britain 52,000,000 spindles and 750,000 looms, as against 48,000,000 spindles and 680,000 looms the same time last year, while there are under construction 6,000,000 spindles and 40,000 looms. Bearing upon that point is the following statement by Messrs. Latham, Alexander & Co.:

"The seemingly high prices prevailing for cotton are purely the result of a continued and active demand for cotton goods on the part of consumers, whose buying capacity has been largely increased by the general prosperity throughout the world, and cotton advanced in value, in keeping with all other commodities that the world wanted and had the money to buy."

THE COTTON MOVEMENT.

In his report for October 18 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 48 days of the present season was 1,812,012 bales, a decrease under the same period last year of 391,195 bales. The exports were 805,821 bales, a decrease of 190,666 bales. The takings were, by Northern spinners, 157,159 bales, a decrease of 36,-

639; by Southern spinners, 300,638 bales, an increase of 5675 bales.

TIME TO TALK OUT.

A leading banker of the central South, a man long identified with the best interests of his section, a son of a father whose name is honored and revered from one end of the South to the other, came into the office of the MANUFACTURERS' RECORD a few days ago, and while discussing the general business situation in the South said in substance, as near as can be quoted from memory, as follows:

"I have developed my banking interests to a point where I feel that I should no longer concentrate all of my time and thought upon money-making. It has seemed to me for some time that I should give more thought and attention than I have done to the advancement of the South in every good work; for, having a number of sons, I am looking to their future and hoping not only to leave them a name that counts for something, but to help in leaving them a country in which every natural advantage has been utilized to the broadest development of mankind."

Discussing the subject in that spirit, the MANUFACTURERS' RECORD said to him that as he recognized his responsibility to his country and to his own people, and as he felt very keenly the danger of the present spirit of unrest and hostility to corporation interests, especially railroads, that it would seem that just now he could do his greatest work by leading the people of his own immediate section in taking a stand for conservatism and for material upbuilding. To this he replied that he felt the necessity of the subject so deeply that he had already consulted with another Southern banker to see whether some plan could not be formulated for the banks of the South to guarantee to take at least \$10,000,000 of securities of one or two leading Southern railroads in order to enable them to carry on the construction work which they have been forced to stop by reason of their inability to secure money.

"That," said the MANUFACTURERS' RECORD, "is an interesting suggestion, but it is probably visionary. Moreover, it would be but a drop in the bucket. Southern railroad development needs fifty times that much. But are you, as a banker, willing to invest your money and that of your depositors in securities about the safety of which there can be any question? Are you willing to put your money into an enterprise upon which doubt has been cast as to its future? Are you any less particular as to your investments than is the outside capitalist? You admit that it is impossible for the railroads to secure outside money because of legislation enacted and threatened, and because of the apparent hostility to railroads. Grant all the sins charged against railroads. Even grant, if you will, though this is not wholly true, that their own misdoings have brought about conditions which developed this hostility. This does not in any way change the situation. It is not only the railroads, but the people, we are trying to save from ruin, for railroad ruin means poverty for millions of individuals. The higher cost of living, of wages, of materials so increases the cost of railroad operation that higher rates, instead of lower rates, may be necessary to save the roads from ruin. The South needs more railroad facilities a thousand times more than it needs lower rates."

To this the banker replied that, viewed in that light the idea was not practical, and that the Southern investor would be just as careful about not putting his money in enterprises over which a cloud was hanging as would be the outside man.

and "therefore I am compelled to admit," said he, "that my tentative suggestion is entirely impracticable. But what can I, as an individual business man, do to show my appreciation of the situation and to strive to lead the South out of this deplorable condition, for railroad work involving many millions of dollars has been discontinued because of the inability of railroads to get the money needed."

To this the reply was made:

"Awaken the people of your community to their individual responsibility to stem the tide of agitation and to turn the current which has been setting so strongly toward the destruction of confidence in railroads to the upbuilding of confidence, in order that the hundreds of millions which are needed for railroad expansion may be obtainable. Upon you and upon every other business man who looks upon the situation as you do there rests a great responsibility to the people of your community and to your State. You believe that your business interests are being endangered; that unless this agitation be checked your section will be thrown back years. You recognize that the magnificent prosperity which the South has been enjoying can be as effectually destroyed by the chill of anti-corporation activity as is a cotton crop cut short when struck by a biting frost. You know how, with the most brilliant crop prospects, there may come over night a killing frost which may largely destroy your crop and your neighbors', and sometimes that of a large part of the South. Worse than a killing frost to the cotton crop may be the frost which will settle upon the investment of outside money so badly needed in the South for carrying forward the great work of Southern upbuilding if present conditions continue. In destroying the railroads we may destroy ourselves."

Replying to this the banker said:

"I fully recognize the situation. I fully appreciate my responsibility as outlined by you, but I have large business interests which could be seriously injured, if not destroyed, by adverse legislation. If I were to take an active part and be known publicly as fighting the populism of my State the Governor, who is so determined to carry everything his way, would in revenge endeavor to secure, and possibly would secure, legislation hampering and restricting, and possibly destroying, some of the very business interests with which I am identified. I am, therefore, as much as I regret to say so, unable to take such a stand as you suggest without the risk of suffering great loss."

To this the MANUFACTURERS' RECORD replied:

"Then you and all others who hold your views and are prevented by fear from expressing them are tied hand and foot. It is practically political slavery which holds you. Rest assured that so long as that condition prevails, so long as you and others are afraid to speak out on any public question, no matter whether you favor or oppose policies advocated by national or State administration, you are not only in danger of seeing your business prosperity destroyed, but in danger of a calamity a thousand times worse, viz., the destruction both in yourself and your children of that moral stamina and fiber without which material prosperity would be but a curse. If any of the people of the South or any portion of the country are, through fear of possible vindictive legislation, prevented from taking an active part publicly against the populist and socialistic agitation of the day, then surely their greatest danger is a weakening of that moral fiber which makes for backbone and stamina, which dares to do right, though the heavens fall."

PROBLEMS IN SOUTHERN COAL PRODUCTION.

[Written for the Manufacturers' Record.]

Interdependence of the many factors in American progress is emphasized in a discussion below by leading operators in the South of conditions surrounding the mining, transportation and marketing of coal. Few of them report a satisfactory situation, in spite of the fact that the markets for Southern coal, especially in the South and at points beyond the Ohio, in Ohio, Indiana and Michigan is growing more rapidly than the output may reach the markets in some cases and in others than the actual production. Some operators are confronted by a shortage of efficient labor, some by a shortage of transportation facilities and some by a shortage in both particulars. It is pointed out that the coal business doubles in every 10 years, and that its present increase is greater than the ability of the railroads to meet its demands. Requirements for coal for consumption have gone beyond the point where the transportation companies may make deliveries, so that, even if all the operators could get the cars for filling their orders, the railroads could not handle the output. One large operation has available a car tonnage only about 50 per cent. of what its orders and equipment would justify for the next four years. Others, like some railroad managers, have been caught short of facilities for meeting orders because they hardly dreamed of the rapid advancement which the country has made in the past few years.

In some instances the very efforts of the railroads to meet new conditions have contributed to the acuteness of the situation, and the building of railroads into new coal fields has tended to reduce the number of cars available for the mines as a whole. Extensive improvements have been made in trackage and terminal facilities, and there have been additions to equipment, but still the enormous increase in general business has taken up a large proportion of the added facilities, and where there is sufficient trackage there is either irregularity in the supply of cars or persistent shortage in the number of them, or cars full of coal or coke are congested at various centers because of a lack of motive power. Then, too, in spite of the effort of the railroads to overcome the difficulties in the mining field, in which some of them have been fairly successful, they are hampered by the unreasonable time occupied by dealers in unloading the cars, 72 hours often being lost in this way, when 24 hours should suffice. Even where the scarcity of cars, incidentally due to active fall business in many lines, might have been ordinarily overcome, financial conditions in the money centers of the country have forced the transportation companies to curtail orders for equipment, and more serious inconveniences from lack of transportation are likely to follow unless there should be a decline in industry generally reducing the demand for fuel.

In sections where the mines have to be worked by native labor railroad construction for the development of the coal fields has temporarily reduced the workings of the mines, for the supply of labor is not large enough both to mine coal and to help to increase the facilities for hauling the coal from the mines. But good miners, too, are very scarce, and there seems to be an inclination on the part of any who are working to be improvident, to develop unreliability and to waste time going from mine to mine looking for snap jobs and quitting other jobs before they have been finished. Higher wages do not seem to better the situation, inasmuch as the miners make so much money that they will not

work full time. Existing embarrassments are indicated by the urging on the one hand of the bringing in of Hungarian and Italian miners, who want to work every day and to save money, so as to compel native white and colored miners to get up and hustle, one operator even suggesting a revision of the laws so as to permit the importation direct from Europe of contract labor, while in another field, where the labor is largely foreign, a great deal of time is lost about pay-day by the men carousing for a week or 10 days and also by their celebration of many holidays.

It is obvious, from the discussion, that only an extension of facilities at the mines and a greater ability of the railroads to handle the output will enable consumers of the country to have a uniform and ample supply of coal.

The letters from the representative operators follow:

The Black, Sheridan, Wilson Company, Georges Creek coal, Baltimore, Md.:

"So far as our observation goes, there is a scarcity of cars on all railroads incidental to the usual active fall business and belated buyers; also due to the desire to get coal forward by water routes before ice closes navigation. The scarcity of cars, we think, is rendered more acute than usual owing to the inability of the railroads to raise money by the sale of securities. There is no doubt in our mind that all of them are greatly hampered in this. The supply of miners is equal to the demand in our district. We understand there is some scarcity farther South."

C. J. Creveling, superintendent Blackwood Coal & Coke Co., Blackwood, Va.:

"This is a subject which should be gone into very carefully, as it means a great deal to all of us. In the first place, good miners are very scarce, and the class that we are working are not at all provident, and the majority of them are content to live in filth and squalor, with no thought of the future. They merely eke out a bare existence, and only work when they are compelled to by reason of empty stomachs. There is no good reason why the miners in this field should not be able to earn at least \$100 each and every month of the year. We endeavor to make the surroundings as pleasant as possible, giving them good warm houses at reasonable rental and also selling them necessities of life at a reasonable figure. While the South is supposed to be a cheap labor country, I have found it to be the highest-priced of any in the United States on account of its inefficiency and the amount of the loss of time each month. While cars seem to be very scarce, I do not believe that this is the fault as much as the lack of motive power. It seems that the Louisville & Nashville Railroad has plenty of rolling stock, but its motive power is woefully inadequate, and therefore coal and coke are congested at the different terminals, and this, of course, curtails the production. The market for Southern coal is growing rapidly, but I do not believe that it is growing faster than the output, as a large quantity of our product is sold in Ohio, Indiana and Michigan. The only way that I can see to better conditions in this field is to bring in about 1000 immigrants, either Hungarians or Italians, who have some well-defined object in life and who want to work every day and save money, and this will compel the native white and colored miners to either get up and hustle or starve to death."

J. C. McKinley, president and manager Richland Coal Co., Wheeling, W. Va.:

"Our experience is that the great need of the coal producer is more labor. There

is an extreme shortage of labor in this section, and we are paying higher wages than ever before. This ordinarily should bring in an abundance of labor, but it does not seem to do so. Another serious complaint is the lack of cars, but this is only applicable to one or two roads, principally the Baltimore & Ohio. That road has not taken the precaution to increase its facilities with the growth of its tonnage, and therefore coal shippers located on its lines are at an additional disadvantage on account of the lack of facilities. Answering your last question relative to the growth of the market, it seems to me that the consumption has now reached a point almost equal to the normal production, and that only an extension of facilities at the mines and an increase of their ability to handle tonnage on the part of the railroads will enable the consumer to have a uniform and ample supply of coal."

C. H. Zehnder, president the Austen Coal & Coke Co., New York:

"We find a scarcity of miners, but what is probably more serious, the men we have on our payrolls are making so much money that they are not inclined to work full time. As a matter of fact, the increased wages have had a tendency to produce a poor class of men; in other words, the ordinary miner or laboring man is not stimulated to do better work by higher wages, but, on the contrary, they seem to be satisfied to earn enough to eat and drink and clothe themselves. There has been some shortage of cars at times, but as a rule we have been fairly well supplied and have no general complaint to make against the Baltimore & Ohio in this connection. I believe that the operating department of the Baltimore & Ohio Railroad is most efficient, and that they are obtaining the very best results, considering the difficulties they have with the labor problem. I am not inclined to believe that a larger supply of cars on this particular line at the present time would be of any special advantage, and I am also of the opinion that the management of the road is wide-awake to the necessity of its shippers and will provide such equipment from time to time as the necessities demand. The market for coal has been developing very rapidly, and particularly for the better grades."

F. W. Horschler, superintendent the Austen Coal & Coke Co., Austen, W. Va.:

"Our operation is hampered both by lack of labor and transportation facilities. Our trouble is altogether due to scarcity of labor. The market for Southern coal is growing rapidly, but I do not think more rapidly than the output. One trouble is we have good work six months in the year, when we cannot fill all our orders, and if all the operators could get cars and could fill their orders the railroads could not handle the output on account of scarcity of equipment and labor."

Charles E. Hellier, Boston, Mass.:

"With reference to the matter of coal shortage in the South, I beg to say that, in my opinion, it is due primarily to the lack of transportation facilities, consisting of lack of terminals, trackage facilities, cars and motive power. There is at present a scarcity of miners, but that is probably only temporary. The great difficulty comes from the lack of transportation facilities. The coal business doubles every 10 years, and the present increase is more than the railroads are in a position to handle, and with a poor outlook for obtaining new capital it would look as though the supply of coal would not equal the demand unless such hard times set in, owing to the lack of a sufficient amount of currency, as to reduce the demand for coal. The railroads are doing the best they can with their present resources, and

cannot be blamed for not furnishing more facilities if they have not the money to do it with."

C. G. Blake, president the C. G. Blake Coal & Coke Co., Cincinnati, Ohio:

"We are principally interested in the New River field of West Virginia, but we handle considerable coal from the Kanawha field and some from the Fairmont field of West Virginia. We today have reports covering the loading in the New River field for October 11 and 12. On these days at least 40 per cent. of the mines did not ship any coal, giving as their reason that the men were out. The other mines in the New River field made shipments of about 40 per cent. of their several capacities. I would say that this condition is prevalent at all of the mines in West Virginia. Owing to the extensions of the railroads opening up new coal territory and increasing the number of mines, the cars owned by the several railroads are not enough in numbers to give all of the mines a supply for all they could ship, and there are not enough miners in West Virginia to give all of the mines all they could work. I think the railroads have more cars, and there are more miners in the field, and the production of the fields as a whole are greater than they were last year, but the productions of the individual mines are considerably less. I think it is unreasonable to expect miners to work three or four days per week for as little wages as they would be willing to accept were they given employment six days per week, and I also think it is unreasonable to expect the railroads to own enough cars to give the mines a full supply, according to their individual ideas and demands, for that would put so much coal in the market that it would compel the mines to shut down for want of orders in a short time, and I also think it unreasonable for the consumers or dealers in coal to insist upon the railroad companies permitting them to use railroad cars beyond a reasonable time for unloading. I have resigned my membership to one organization in Ohio simply because they were demanding 96 hours' time for unloading a car of coal, while, in my opinion, 24 hours was ample time to do it, and it was my opinion that any dealer who could not make arrangements to unload a car of coal in 24 hours would do well to go into some other business. It is certain that a railroad company cannot lose the service of its cars for three days without recompense, and I think it better that the one who detains a car beyond 24 hours should pay the expense rather than that the general public should pay for 72 hours' usage whether they caused the delay of the car or not. I think the remedy is to let the coal-consuming public thoroughly understand that they pay the miners' wages and the operators' profit; they pay the freight, and they also pay for the use of the car, and that the longer it is used the higher the rate of freight must necessarily be. Sentiment for the Miners' Union and for the poor laboring man, who just at present does not care very much about working at any price, and the general desire to take something from the unpopular railroads must all be paid for, and so far as I can see, the people who burn coal, as well as all people who live amongst us, either directly or indirectly, must pay the bills."

C. B. Orcutt, president Chesapeake & Ohio Coal Agency Co., New York:

"From what we learn from our operators, we should say the chief difficulty is scarcity and inefficiency of labor. There seems to be a disposition on the part of miners to work very indifferently."

F. S. Landstreet, president Landstreet Coal & Coke Co., New York:

"I am of the opinion that the present

conditions in the bituminous coal market are due to two causes, viz., lack of development of new operations, limited transportation facilities. To a very great extent the first has been due to the latter. Although the financial conditions for the past five years and until very recently not only made it possible, but encouraged development, the limited transportation facilities have discouraged any considerable extensions. The railroads of the country should be congratulated on the very extensive improvements made in track and terminal facilities and also on their equipment additions, but the enormous increase in general business has taken up a large proportion of the increased facilities, that class of business requiring a very much larger proportion of track, equipment and terminal facilities than the coal trade. When one realizes, too, that the yearly increase in bituminous coal consumption requires some 12,000,000 to 15,000,000 tons additional output, which is greater than the entire coal and coke tonnage of the Norfolk & Western Railway for 1905-1906, and that each year an additional tonnage equal to that of the entire Norfolk & Western territory has to be provided for, it is not strange that we should approach a period of scarcity of this product. But for the fact that certain lines of manufacture are experiencing a cessation in business, the situation would soon be much more serious. Unfortunately, at this time, the financial condition of the country has forced the transportation companies to curtail their orders for equipment and new terminal facilities, which, I fear, will cause more serious troubles. The conditions of the past few years would have been much more serious but for the construction of individual coal cars, and now the rulings of the courts and the Interstate Commerce Commission tend to discourage the building of this class of equipment. Workmen have been scarce and material expensive and hard to procure, but these are only secondary to the two general causes for the inability of coal companies to fill their orders. The fact that foreign producers of coal have about reached their maximum production and that the anthracite region is not capable of any considerable increase leaves the bituminous fields of the United States as the natural and only source of the future increase in fuel supply. I think these conditions should have the serious thought and consideration of the coal and transportation people, and am glad to see you bringing the subject before them."

Elmer Hough, vice-president and general manager Beech Bottom Coal Co., Wellsburg, W. Va.:

"There is a scarcity of miners and a large per cent. of inefficient miners and labor. Time is consumed in going from mine to mine looking for snaps and leaving jobs (without any notice whatever) unfinished. At least 25 per cent. of labor is lost through lack of labor co-operation, and just that much tonnage is lost. Railroads in this section appear to be able to take care of all tonnage produced."

Webb J. Willits, vice-president Norton Coal Co., Norfolk, Va.:

"From our own standpoint, the trouble is due to both lack of labor and lack of transportation facilities. The conditions in the labor market at this time are very bad, and are caused, in our section at least, largely by the fact that there is a great deal of railroad construction going on, and all of the colored laborers very much prefer working on a grade during the summer to working either in a mine or on the coke yard. This is true more of summer business, but with the coming on of cold weather a great many of these men are coming to the mines for steady employment during the winter. The old miner

who used to cut and shoot all of his coal is getting to be quite a curiosity, as the introduction of machines has to a great extent made it unnecessary for a man to be a practical miner, and they are getting now so that they insist on working after a cutting machine, where there is nothing to do but to shoot and load. The cutting machines, in our particular case, have never proven as satisfactory as is the case when the men mine and cut the coal themselves, because of the frequency of breakdowns, in which case the output of the mines for that day is practically nothing. The laborers are also of a very unreliable class, working only when they feel in the mood, and with the scarcity of men it is impossible to make any hard and fast rules compelling them to work a certain part of the week, and if this is even suggested to them they tell you very frankly that if you don't like the hours they spend in the mine they will go elsewhere, and all of the coal operators are in exactly the same predicament. In other words, we are to a great extent tied down by their own desires, and they make money enough during during two or three days of the week to loaf around the balance of the time. The car scarcity is another vital point which affects the production of the coal mines, in that when the men are in and willing to work the car supply is such that they cannot, and when cars are received they then refuse to work. Our supply of Norfolk & Western coal cars is considerably short of our demand, and of coke cars on the Louisville & Nashville not much over one-half. The Louisville & Nashville trouble, we are advised, is due to a great extent to the fact that they are having a strike of the mechanics which has tied up quite a number of their engines at Louisville awaiting repairs, and they have not sufficient motive power to handle the business. There is no doubt but that if the car supply and labor question were satisfactory all the coal could be produced which could be used, and although the demand for coal is increasing all the time, yet with the number of new operations starting up do not think there would be any trouble in handling this business if they were all able to secure sufficient labor."

C. H. Smith, chief engineer the Davis Coal & Coke Co., Cumberland, Md.:

"Our operations are not hampered to any extent by lack of labor or lack of cars. We find that wherever the work is steady and accommodations are provided for the men there is very little trouble in getting miners. With regard to the efficiency of the miners, will say that the class of labor at our Elk Garden and Piedmont mines is very good. At the lower end of our field at Thomas, Coketon and Weaver our labor is largely foreign, and a great deal of time is lost about pay day by the men drinking and carousing for a week or 10 days and also the excess number of holidays which the foreigners celebrate. With these conditions an over-supply of labor is naturally an ideal condition, but if the men that we have were efficient the situation would be very well covered."

M. O. Brooks, vice-president and general manager Chesapeake & Ohio Coal & Coke Co., Richmond, Va.:

"It is true that there seems to be a great inability of many coal companies to fill their orders. We have scarcely ever known a greater demand for coal than seems to exist at this time. We were forced to refuse additional business as early as July 25, and our action in doing so has enabled us to fully protect our contract customers. Speaking for the New River field on the Chesapeake & Ohio Railroad, there seems to be a considerable scarcity of labor, and such labor as is at work in that field does not seem to be

producing anything like the quantity of coal we could rightfully expect. We think that this light production of the miners per capita has helped to enable the railroad to give a very fair supply of cars, and as compared with other years there is little to complain of in car supply, though it is but fair to say that the Chesapeake & Ohio Railroad Co. has made large purchases of cars during the year and is at this time receiving 4000 new 50-ton steel cars. As regards the Southern market for coal, we think there is a distinct increase, especially for higher grades of coal. At all events, this is our personal experience; we are shipping fully twice as much coal this year into the Southern States as we have ever done."

Sturgis G. Bates, agent estate of N. Thayer, Kentucky properties, Riverton, Ky.:

"Our greatest difficulty at the present time is the lack of sufficient labor to operate the mines and produce all the tonnage that we have market for. We have until a very recent time been hampered by lack of cars, but that trouble has now been overcome by the railroads concerned in the movement of our output. In regard to the cause of the scarcity of labor would say that, in our opinion, it is largely due to the extraordinary demand for labor in other lines, which are more attractive, both as to working conditions and rates of pay, than the mines can offer. So far as our portion alone is concerned, we cannot see any change in the efficiency of labor, as we have practically the same men who have worked for us for many years, and only a small number of floating employees.

As to growth of the market for Southern coal, beg to say that we hardly feel justified in placing ourselves in that trade, as the greater portion of our tonnage goes to Cincinnati and points north of the Ohio river, and we are not in position to ship to the South at all other than a small portion of the State of Kentucky."

G. H. Caperton, president New River Consolidated Coal & Coke Co., Caperton, W. Va.:

"The ramifications pertaining to the production and marketing of coal are so many and so great that it is hard for one to satisfactorily explain conditions as a whole. Our idea in this section is that the consumption of coal has gone beyond the point of the ability of the transportation companies to make deliveries. Coupled with this is the fact that there is a scarcity of labor of all classes. There is not only a lack of labor, but the inefficiency of the same is startling. We think that there is no doubt but that the market for high-grade Southern coals is growing more rapidly than the output. We greatly fear an increased shortage of equipment during the winter months. We hardly think that a discussion of this matter to any extent would do any good. Only active work and push will meet the situation."

Poplar Creek Coal Co., Oliver Springs, Tenn.:

"While there is a shortage of coal cars all over the South, our greatest drawback is shortage of labor. Miners don't work like they did 20 years ago. They go in late and come out early and spend a great deal of time sitting out on the entries smoking their pipes and 'cussing' the operator. Truly, it appears to us that the market for Southern coal is growing more rapidly than the output. As to the shortage of cars, it is hard to tell the cause. We hear a great deal of the financial condition of the railroads, but in this particular part of the South we are of the opinion that double-tracking would help as much or more than anything else. We see quite often trains side-tracked for some time waiting for other trains to get

out of their way. Of course, it would cost a mint of money to build all of these tracks, and as labor is scarce it would take some time to do it. We feel that the railroads (or their managers) are like ourselves; they did not dream of the advancement and improvement and development of our country. We also feel that we should use great care in enacting laws relative to railroads and their management. We could do in one day's time that which it would take years to undo. If our people would only treat the railroads as honestly as the railroads would treat them we would all get along better. As long as we have our money invested in this business and are dependent on the railroad company 'we are not going to rub the hair the wrong way.' Let our people take into consideration the enormous amount of business being handled by our railroads and then ask themselves the question: Could I handle the business any better?"

A. H. Reeder, general manager Stonegate Coke & Coal Co., Stonegate, Va.:

"The Stonegate Coke & Coal Co. has had no unusual difficulty in procuring sufficient cars to ship our output. Our tonnage, however, has been at least 50 per cent. below what our orders and equipment would justify for the past four years. This has been largely due to the great scarcity and partly to the inefficiency of labor, both for our mines and coke yards. The market for Southern coal is growing very rapidly larger than the output, and the market for coke is still very much in excess of the ability of Southern operations to manufacture it. So far as I know, troubles of other coal and coke concerns operating in the South are identical with those that we are constantly harassed by, that is, the scarcity and incompetency of labor. The demand for labor in the mining sections of the South is greatly in excess of the negro and native white supply, and because of our distance inland and because of the comparatively small number of immigrants who reach Southern ports the native supply of labor has not been sufficiently augmented by foreigners. The situation is becoming worse daily, and I believe that the only solution is—

"First—An organized effort on the part of steamship companies and Government immigration employees to induce labor coming to Northern ports to come South.

"Second—To induce steamship companies to run steamships carrying immigrants from Europe to Southern ports.

"Third—A revision of the laws which will permit States and individuals to import direct labor from Europe on contract to the South."

E. W. Britton, general manager the Strawn Coal Mining Co., Strawn, Texas:

"We find no trouble in getting sufficient cars to load all the coal we can mine. Our chief trouble is partly due to our inability to get plenty of men to mine our coal and a desire on the part of the men we do have to restrict the output as much as they possibly can with a view to forcing operators to pay higher wages. We also find that in this particular territory the demand for coal is increasing faster than the output, but it seems to be the policy of the labor union to restrict the output as much as possible by not mining as much coal as they could do, and by placing such high initiation fees on men who wish to join the organization that it is practically prohibitory."

Scott County Coal Co., Helenwood, Tenn.:

"As the successors to the Ridgeway Sprinkle Coal Co., we would say that while our output is off, it is more from the shortage of labor than any other cause. Just why we should be in this condition we cannot say, because our best miners earn from \$4 to \$7 a day, and we have a camp con-

venient to the outside world and a healthy location. The condition is, we think, a temporary one, and we are looking forward to a good season, as our output is placed at a satisfactory price whether it is much or little."

Without entering into details, the Federal Coal & Coke Co. of Grays Flats, W. Va., reports lack of transportation facilities and scarcity and inefficiency of labor, and that it is up to the railroad to provide needed facilities; the Black Bear Coal Co. of Four-Mile, Ky., that it has a shortage of labor.

Pensacola Paving to Cost \$500,000.

One of those instances to which the MANUFACTURERS' RECORD frequently refers as indicating the great interest which Southern municipalities are taking in improved streets and other betterment work is seen in the advertisement of the city of Pensacola, Fla., for paving. Proposals are now being invited, and it is understood the cost will approximate \$500,000. Inasmuch as Pensacola (county-seat of Escambia county and a port of entry on Pensacola bay) has less than 20,000 inhabitants, the decision to expend such a large amount for improved public highways is an unusually creditable undertaking for the people of this progressive Florida city. The following report from Pensacola is of interest: Invitations for proposals have been forwarded to prominent construction companies throughout the South, and it is expected that there will be many bidders. The paving will amount to 170,700 square yards, and also 115,950 linear feet of curbing, which is to be of concrete. The class of material will not be decided upon for paving until the bids are opened, and it will then be decided which is the lowest and best material for the work to be done. The bids call for proposals of brick, sheet asphalt, bitulithic, wood block and macadam, and by this means bids will be received for every class of pavement known. The money to be expended is to be obtained by the sale of bonds. A portion has already been sold, and other bonds will shortly be advertised. In addition, abutting property-holders and railway companies will pay a large amount of the cost. Mr. L. Hillon Green is chairman of the bond trustees and T. Chalkley Hatton of Wilmington, Del., is the chief engineer.

OPENED A NEW COAL FIELD.

Completion of the Kanawha & West Virginia Railroad.

[Special Cor. Manufacturers' Record.]

Charleston, W. Va., October 18.

By the completion of the Kanawha & West Virginia Railroad from Charleston to the town of Blakely, nearly 35 miles from Charleston, a new coal territory has been opened up in this section. This development is being made largely by Pennsylvania capital, and Pennsylvania coal-mining men are interesting themselves in the development of the territory.

The Blue Creek Coal & Land Co. owns 45,000 acres of most excellent coal lands located on each side of the railroad. The property has been surveyed and opened up in a remarkably thorough manner, more than 100 openings having been made for the purpose of testing the coal, and a complete lease map made showing the boundaries of all outcroppings. Outside of the five leases already made, the balance of the property will be offered for lease. There are now four mines in operation and two others in process of development.

The Blue Creek Coal & Land Co. has two mines in operation at present, one a double tippie at Wills' Hollow, where mining is being carried on from both sides of the ravine, and another at Blakely, where there is a single tippie, which will be converted into a double tippie, so that

mining here also will be carried on from both sides of the hill. The output of these two mines at present is over 500 tons per day, which is being increased rapidly, and will soon reach 2000 tons per day. There is now being constructed at Blakely an electric-power plant, which will serve both operations. The plant will have two 150-kilowatt generators, furnished by the Morgan-Gardner Electric Co. of Chicago. There will also be installed two Skinner engines and four Union Iron Co. boilers. The coal will be transported from the mines to the tippie by five seven-ton motors, and five Morgan-Gardner mining machines will be installed. At present one vein is being worked, namely, the well-known No. 5, Kanawha seam, which is located about 200 feet above tippie height, which is a splint coal of excellent steaming qualities and of a hard, blocky nature, which stands shipping well, and for which a ready market has been created in the West and Northwest. This seam is found throughout the 45,000-acre tract, and averages about five feet in thickness, being exceptionally clean and of easy preparation. This property also contains all of the other Kanawha coal seams. The Lewiston, which is on nearly all sections of the property, averages about six feet, and is about at tippie height.

The Roderick Coal Co., of which Edward Roderick of Scranton, Pa., formerly State mining inspector of Pennsylvania for 11 years, is president, has two large-sized leaseholds on this property, one of which is in operation and the second in process of development. His two mines, when completed, will have a capacity of 1500 to 2000 tons daily. Improved methods of mining are being installed by the Morgan-Gardner Electric Co. of Chicago, to consist of two 100-kilowatt generators driven by Erie engines. There are two six-ton haulage motors and three mining machines. Mr. Roderick's electric plant will be in full operation before November 1. Owing to the fact that there is always a market for Kanawha splint coal, a very rapid development of these seams is assured.

The Blue Creek Coal & Land Co. is negotiating with a number of Pennsylvania operators for leaseholds on this property.

The excellent service offered by the Kanawha & West Virginia Railroad is another important factor that adds to the desirability of this territory for acquiring leaseholds. This railroad has been built at a remarkably low grade, the maximum grade being three-tenths of 1 per cent. in favor of the loaded movement. The railroad has been built in a most substantial manner with 80-pound steel rails, steel bridges, first-class masonry, and having all the features of a first-class standard-gauge line.

Main-line rates are afforded all shippers on this line of road, which, through its connections, opens up a large and desirable market for the coal from the Blue Creek territory. Connections are made at Charleston with the Kanawha & Michigan Railroad and the Chesapeake & Ohio Railroad, and at Blue Creek, 13 miles above Charleston, with the Coal & Coke Railroad.

The railroad has a 3000-foot frontage on the Elk river, running to the mouth of that stream in West Charleston, which is to be improved by the building of river tipples in order that river navigation will be afforded operators along this line of road, as well as shipments by rail. This will be an important addition to the coal-shipping facilities of Charleston, and will give the operators of the Blue Creek territory advantages which are unsurpassed by any in the Kanawha coal field. The railroad now owns and operates 350 freight cars

and three locomotives, in addition to its passenger equipment.

By reason of the car service and per diem agreements the railroad is enabled to have these cars returned from the lakes in the shortest possible time. The average time for the round trip between Blue Creek and Toledo during the summer and fall of this year has been seven days. This gives excellent car service to shippers of coal in the Blue Creek district. In anticipation of the largely-increasing business, the railroad is now completing arrangements for the purchase of 500 additional coal cars.

The Kanawha & West Virginia Railroad is capitalized at \$5,000,000, and the stockholders are very largely capitalists of Scranton, Pa. The officers are Edward S. Jones, Scranton, Pa., president; ex-Governor MacCorkle, Charleston, W. Va., first vice-president; C. D. Jones, Scranton, Pa., second vice-president; Thomas E. Jones, Scranton, Pa., treasurer; William D. Boyer, Scranton, Pa., secretary.

W. C. Franz, formerly division superintendent of the Kanawha & Michigan Railroad and the Hocking Valley system, who has been connected with these railroads for nearly 18 years, and who is thoroughly familiar with the coal and railroad conditions in this section, is in charge as general manager of the Kanawha & West Virginia Railroad and the Blue Creek Coal & Land Co., with headquarters in Charleston, W. Va., which position he assumed April 1 of this year.

The stockholders of the Blue Creek Coal & Land Co. are practically the same as those in control of the Kanawha & West Virginia Railroad. ALBERT PHENIX.

Lake Borgne Canal.

It is stated that Messrs. Charles D. Haines of New York city, W. J. Kelly, W. P. Ross, M. J. Sanders, R. A. Warriner and Edgar H. Farra of New Orleans, La., have purchased an interest in the Southern Transportation Co., which took over the Lake Borgne canal and locks from the old canal company. Their intention is said to be to put the canal and locks in thorough repair and to establish a barge line for freighting coal from the Alabama coal fields to the Gulf for further shipment to markets. The New Orleans States credits Mr. Haines with confirming the announcement and as stating further that a new company will be formed which plans an early expenditure of probably \$1,500,000 for the purchase of barges, tugs and other vessels to transport the coal, the barges being of substantial construction, so that they can be used indefinitely.

Col. Dan C. Kingman, one of the board appointed by the Government to direct the work to be done by the Government in connection with the improvement of navigation in the Tennessee river at Muscle Shoals, Alabama, stated at Savannah last week that the board has about everything arranged to start the work except finding out who is going to build the locks that will be necessary to navigation after parts of the river have been dammed. He referred to the project of capitalists to spend \$18,000,000 in developing the water-power of Muscle Shoals, and pointed out that the Government and the capitalists were now trying to determine who is to build the locks.

The Intercoastal Inland Waterways Commission will hold its annual convention at Houston November 8-9 for the purpose of furthering the plan of constructing a canal from Donaldville, La., along the coast country of Louisiana and Texas to Brownsville, Texas, not only connecting the Rio Grande and the Mississippi, but every river in the two States emptying into the Gulf.

The Water-Power Development at Whitney, N. C.

[Special Correspondence Manufacturers' Record.]

Greensboro, N. C., October 18.

Manufacturers operating mills within a radius of 80 miles of the great Whitney water-power development on the Yadkin river at Whitney, N. C., cannot appreciate the great benefits which will be derived from this work when completed and the scope of work being done at that point unless they have personally visited the point at which this work is being done, showing the gigantic undertaking of harnessing one of North Carolina's most powerful streams, which will furnish to North Carolina manufacturers electric power at a very much less cost than has hitherto been created by steam and other methods.

The thought that the South would ever become a great cotton-manufacturing section was until recent years a mere jest by Northern mills, and yet within a brief period of a few years rapid strides have been made and such success achieved by the few mills which undertook to manufacture cotton as has not only compelled the recognition of the South as the logical field for the successful manufacture of the South's great staple, but to successfully compete with the formerly small mill of the South many great manufacturing plants from the New England States have been obliged to erect mills in the South each year near where the raw material is grown.

If North Carolina and the cotton-manufacturing section of the South possessed coal, or could produce the necessary fuel used by their plants at as low a cost as the Northern and Eastern mills, it is hard to estimate the wonderful development which would follow as a result, when we take into consideration the fact that our labor is 20 per cent. cheaper, our raw material at our door and climatic conditions so favorable as to make living much cheaper than can be had in the North or East.

At present several large water-powers in the Southern States are being developed, but there is doubtless none which is looked upon with greater interest or will lessen the cost of power to our mills more than that power which will be furnished by the Whitney Company at the Narrows on the Yadkin river.

The recent visit to this plant by the delegation of citizens of Greensboro and High Point in the interest of securing power to operate a large number of manufacturing establishments located at these points was a great surprise to the representatives who composed the party. In addition to the representatives from these two cities a committee was also present, entertained and shown over the work of the Whitney Company, from England, Germany, France, Italy, Portugal and Australia, who expressed great surprise at the possibilities North Carolina possessed for making this section the greatest manufacturing center in the South.

The Yadkin river, which rises in the western counties of North Carolina, flowing easterly near Salisbury, and is the dividing line between Stanley and Montgomery counties, is a stream of considerable size and has enormous falls, making possible the development of valuable water-powers at many points along its general course.

About 1897 Mr. E. B. Hambley, who prior to that time had for about four years been associated with Mr. Cecil Rhodes in his world-wide achievements in South Africa, giving up his work there and came to North Carolina largely on account of the climatic conditions necessary for his health, making his home at Salisbury. Mr. Hambley was a man of wonderful mind and large ideas, grasping at a glance the won-

derful opportunities possessed by the various sections of the country through which he passed.

While at Salisbury he visited the various sections of North Carolina, and on familiarizing himself by personal visits to various points along North Carolina's various watercourses and the valuable aid rendered from the maps of the North Carolina geological survey, he conceived the idea that at no far-distant date North Carolina must grapple with the situation of producing a large portion of the world's cotton product, and that North Carolina must rank amongst the foremost States in the manufacture of the South's staple product, and to successfully compete with the large Eastern mills it would be necessary to provide some means of lessening the cost of the power which was to be used by these manufacturing plants.

After carefully studying the various geological surveys of the State he became convinced that at the point on the Yadkin river some 25 miles southeast of Salisbury, known as the Narrows, exceptional advantages were offered for the harnessing of a great power for generating electricity which would furnish power more cheaply to the mills within a distance of 80 miles of this point than at any other in this section of North Carolina.

At the point selected the Yadkin river is about 1500 feet in width and four and one-half miles up the river from the "Narrows," which are only 60 feet in width.

After careful consideration and mapping out plans Mr. Hambley had surveys and blueprints made, and visited New York, Boston and other Eastern cities with the hope of interesting capitalists to aid in the gigantic undertaking of developing what was to become one of the greatest water-powers in the South.

When his plans were laid before capitalists they were all convinced that the idea was a good one, but the undertaking too great, especially for success in the Southern States.

Undaunted by the rebuffs he first encountered, he continued to perfect his plans, and in 1901 Mr. Geo. I. Whitney, a prominent and wealthy banker and coke manufacturer of Pittsburgh, Pa., decided that no greater monument could be left to his memory than that of constructing a water-power in North Carolina which would stand for centuries to come as a monument to aid in the rejuvenating of cotton manufacturing in the new-born South.

In 1904 the Whitney Company was organized and aggressive work begun. This work has been steadily pushed forward, and at the present time about 3000 feet of massive granite dam has been constructed, the base of which is 60 feet in width and has a height of 47 feet.

All the stone used in the construction of this dam is supplied from the immense granite quarry owned by the company, and the average weight of the stones used is nine tons.

This dam is now completed. On the west side of the dam is an enormous canal which leaves the main body of the river and across the rolling uplands for a distance of four and one-half miles, leaving the river to the left a distance of one mile.

This canal is 40 feet wide at the base and 130 feet at the top. The minimum depth of water which will be carried from the dam to the power-house, which will be located at the Narrows at a point at which the canal will deliver the water carried back to the river is 18 feet, while the maximum depth is 20 feet.

In order that the reader may better

conceive the size of this canal, I will simply state that when filled with water it will carry any average passenger steamer which plies from Norfolk to Baltimore.

From the dam to the power-house, along the east side of this canal almost the entire distance, an immense dike has been erected by the surplus dirt and rock from excavating the canal to prevent the overflowing of the lowlands lying between the canal and the river, while to the right of this canal the whole lowlands will be flooded and used as a reserve supply of water, which in many cases will have a depth of 40 feet.

At the point where the power-house will be erected, four and one-half miles below the dam, the water will have a fall of 129 feet from the canal to the river.

The power-house, which is located on the west side of the river, when completed will be 275 feet in length, 135 feet in width and 100 feet in height, and will generate 40,000 electrical horse-power. This building will be erected of concrete and granite, handsome in design and modern in construction. At present 600 men are employed night and day, 100 cars, 16 small engines and 6 large steam shovels.

These steam shovels are the same in size and design as those used by the Panama Canal. When this development was first begun there was to be moved 2,104,000 cubic yards of dirt, of which only 540,000 square yards yet remain unmoved. One hundred thousand cubic yards are moved by these steam shovels every 30 days, and to give some idea as to the rapidity of the work the writer while standing near one of these immense shovels observed that every two minutes and fifty-five seconds each of five of these cars were loaded by these steam shovels with 10,000 pounds of stone and earth.

At one point we observed an immense upheaval of earth, which Mr. J. J. Kennedy, chief engineer, informed us was thrown up by a recent blast put off which required 50,000 pounds or two carloads of dynamite at one blast.

Just west of the dam is the clubhouse of the Whitney Company, known as "Fort Finley," beautiful in design and modern in every detail in its construction. Here many delegations and wealthy capitalists from various parts of the work have been entertained by the hospitable host, Mr. George I. Whitney.

Mr. Whitney is a man of some 60 years of age, and while in conversation with our delegation informed us that he had chosen this method of investing his capital, believing it to be one of the best known to him at the present time, and one which would be of incalculable benefit to North Carolina for generations to come.

This clubhouse is located on a beautiful elevated plateau overlooking the Yadkin river. The dam now under construction, which when fully completed will form a magnificent panoramic view of the continuous range of mountains, between which is the enormous body of water, checked in its onward course by the great Whitney dam, which forces a large portion of the stream into the canal for the purpose of generating 40,000 horse-power by electricity.

The accumulation of this water is gathered from the Yadkin, which has its source in Yadkin county, and the numerous tributaries which give a drainage area of 3938 miles.

On the north side of the Yadkin river lies Montgomery county, the most noted county in North Carolina for the production of gold, while lying to the south of the river is Stanley county, which in general appearance the land seems poor, but is noted for the excellent quality of wheat produced. In 1877 Stanley county won

first prize in Paris for the finest quality of wheat exhibited at that time.

The North Carolina Geological Survey of 1890, Bulletin, No. 8, says: "The section of the river for five miles about the mouth of the Uharie river is quite different in character from that below and above this region. Over the Swift Island Shoals and those to be described further on as occurring higher up the stream the bed of the river spreads out to a width of from 1000 to 1500 feet, and at Grassy Island is not less than one mile wide. But in the three and one-half miles under consideration the river runs through a deep, narrow gorge, and here, perhaps, the most remarkable water-power of the State occurs at the 'Narrows' of the Yadkin at the upper end. Before reaching the 'Narrows' the river is nearly or quite 1000 feet wide, from which it suddenly contracts, entering a narrow ravine between the hills, which rise abruptly on either side with rocky and almost perpendicular banks, and through which it pours with great violence, preserving for a distance of about a mile an average width of not over 150 feet, while in some places the width is only 60 feet. No description can do justice to this place, which is one of the most wonderful spots that can be found in the South."

In the "Narrows" proper—the mile referred to above—the river has cut out its channel in the solid rock, the banks being very steep for a height of 100 feet or more above low water, when they retreat nearly horizontally, but so very broken and rough that it is difficult and tiresome to make one's way along it. The stream overflows its banks in freshets and fills the whole ravine, although it is very seldom that it covers all the projecting rocks. Below the "Narrows" proper the stream expands to a width of 150 to 500 feet and flows at a rapid rate for the succeeding two and one-half or three miles through a narrow gorge, the banks on either side being very steep and rocky all the way except at one or two places, where small lateral valleys diverge, and it is at this point where another large power plant will be erected which will develop about 36,000 horse-power.

This power is also owned by the Whitney Company, and plans are under way for the leasing of this power to other capitalists for development, and it is from this point that power will be supplied to the manufacturing plants at Greensboro, High Point and other cities lying to the north of the Yadkin.

It will require two and one-half years to complete the erection of this power plant, and until that time Greensboro and High Point and several other towns will be supplied with power by the Whitney Company, which will be ready to supply this power by July 1, 1908.

Arrangements are already being made with these cities for supplying the manufacturing plants with electric power.

The Whitney Company now owns 14,000 acres of land adjoining its power plant, both up and down the river, and is making arrangements to build a modern city at that point, and within the near future there will be such a growth and development in the erection of various enterprises at Whitney as can scarcely be appreciated at the present time.

Some 600 acres of land is being laid out for town sites, and everything will be equipped in the most modern style for an up-to-date city. The South Bound Railroad, which is already under construction, will be run through the Whitney property at the Yadkin power-house, and also another road is being surveyed which will give excellent transportation facilities to the town of Whitney.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

W. S. Gray Cotton Mills.

The W. S. Gray Cotton Mills of Woodruff, S. C., has awarded contract to Messrs. Ebaugh & Ebaugh of Greenville, S. C., for the construction of mill building three stories high, 75x325 feet. This building will be equipped upon completion with 10,000 spindles and accompanying apparatus for the manufacture of Nos. 20 to 30 cotton yarns. Particulars of the Gray company's plans were presented in the MANUFACTURERS' RECORD of September 12. The corporation is capitalized at \$100,000, and W. H. Gray is its president-treasurer. Messrs. C. R. Willard & Co. of Spartanburg, S. C., who received contract to build the dam to generate power for transmission by electricity to operate the Gray mill, are proceeding with their work.

Cotton Mill Information Wanted.

The MANUFACTURERS' RECORD is advised regarding plans for the organization of a company with capital stock of \$100,000 to build a cotton mill for manufacturing standard sheeting in an Alabama city. The projectors want information that will assist them in determining all details and invite correspondence from mill engineers, makers of machinery and others prepared to present expert advice. Information is wanted as to the size plant that can be built and operated with \$100,000 capital, how many bales of cotton will be consumed, how many operatives employed, daily capacity in yards of such a plant, and other facts. Correspondence can be addressed to "New Textile Mill," care of the MANUFACTURERS' RECORD.

For a \$250,000 Company.

The Albany Business League of Albany, Ga., will organize a company with capital stock of \$250,000 for the purpose of building a cotton-yarn mill. It is stated the equipment of machinery will include 10,000 spindles and accompanying apparatus, to be operated by electricity secured from a local water-power-electrical plant. Leading business men of Albany have subscribed for \$175,000 of the proposed company's stock. Those interested include Messrs. J. W. Mock, A. P. Vason, H. W. Johnson, John K. Pray, F. F. Putney and many others. The Albany Business League can be addressed for the present.

St. Pauls Cotton Mills Co.

The St. Pauls (N. C.) Cotton Mills Co. has awarded contract to the Mason Machine Works of Taunton, Mass., through the latter's representative at Charlotte, N. C., for the equipment of machinery of the mill to be built. There will be 5000 spindles and complementary apparatus installed for manufacturing cotton yarns. Particulars of the organization and other details of the St. Pauls enterprise were previously announced by the MANUFACTURERS' RECORD. L. Shaw is president of the company, which is capitalized at \$100,000. The engineer in charge is R. C. Bibberstein of Charlotte, N. C.

For Jute Bagging and Burlaps.

Mr. A. R. Sherrill of Statesville, N. C., contemplates establishing a plant for the manufacture of or reworking of old jute

bagging and the manufacture of burlaps, such as is used for wrapping purposes. He wants information on the subject, and invites makers of the necessary machinery to send him prices, together with data as to obtaining raw materials and other particulars that will be of assistance in determining details of the enterprise.

Bag Manufacturing and Printing.

The Ashcraft Cotton Mills of Florence, Ala., will install an equipment for manufacturing and printing bags. This company has begun to establish the new department, and is in the market for the folding, cutting and printing machinery. It is especially desirous of having information regarding a machine that will take the cloth in the piece, fold it the correct size, cut it off and sew up, requiring but one operator.

The Caswell Cotton Mills.

The Caswell Cotton Mills of Kinston, N. C., has been incorporated with a capital stock of \$200,000, the subscribed capital being \$70,100. Messrs. J. E. Hood, J. W. Black, J. W. Grainger, J. L. Herve, F. C. Duncan, S. L. Stough and H. H. Hodges were the incorporators. The MANUFACTURERS' RECORD announced several weeks ago that Mr. Hood and associates proposed forming a mill company.

Proposed \$200,000 Mill Company.

Messrs. C. W. Moore of Junction City, postoffice at Paschal, Ga., and C. F. Reynolds of Broxton, Ga., propose to organize the company referred to last week for building a cotton mill at Junction City. The capital stock will be \$200,000, and North Carolina capitalists will be largely interested. Product will probably be brown cloth. Mr. Moore can be addressed.

Installing 5000 Spindles.

The Kansas City Cotton Mills Co. of Kansas City, Mo., will install 5000 spindles additional to present equipment, as reported recently. It has awarded contract for new machinery, and the installation will be completed by November 1. With this enlargement the company will have a daily output of about 12,500 pounds of cotton products.

The Grace Cotton Mills.

The Grace Cotton Mills of Salisbury, N. C., has organized with Frank Robbins president and treasurer. This company was lately referred to as incorporated with capital stock of \$50,000, and it acquires and will continue the mercerized damask mill established by Mr. Robbins. It is understood that 18 looms now in operation will be duplicated soon.

The Atlantic Cotton Mills.

The Atlantic Cotton Mills is the title of the company recently mentioned as being incorporated by G. B. Patterson and associates of Maxton, N. C. Those interested as stockholders in the enterprise will soon meet to effect organization and consider other details. It is proposed to install from 5000 to 10,000 spindles.

Zebulon Hosiery Mills.

The Zebulon Hosiery Mills, of which details were presented last week, is of Zebulon, N. C., not of Georgia, as erroneously stated last week. The company has its initial equipment of 25 knitting machines in operation producing fine seamless hose, and expects to have 100 machines in operation by January 1.

An Oklahoma Hosiery Mill.

The Cleveland Hosiery Mills of Cleveland, O. T., has been incorporated with a capital stock of \$75,000 for manufacturing knit hosiery. Messrs. Charles E.

Brown and Thomas Adams of Cleveland and A. J. McMahon of Oklahoma City, O. T., are the incorporators.

Huntsville Bagging Co.

The Huntsville Bagging Co. of Huntsville, Ala., will be incorporated with a capital stock of \$150,000 to establish a jute bagging mill.

Textile Notes.

Messrs. J. W. Hatcher, T. J. Appleyard and others propose organizing company to build a cotton-yarn mill.

Messrs. M. S. Bailey & Son of Clinton, S. C., have purchased and will operate the Cross Hill Knitting Mills at Cross Hill, S. C.

Announcement is made that the Whetstone Cotton Mills at Bessemer City, N. C., has been sold to Judson Huss of Gastonia, N. C., for \$19,000.

The Gaffney (S. C.) Manufacturing Co. is reported as to add several thousand spindles to its present equipment of 61,648 spindles and 1500 looms.

Mr. B. B. Boykin and associates of Wilson, N. C., propose the organization of a company with capital stock of \$250,000 for the purpose of building a cotton mill.

Mr. W. L. Murphy, vice-president of the First National Bank, Mexia, Texas, is corresponding with Eastern capitalists who contemplate the establishment of a cotton mill in Mexia.

The Sherman (Texas) Oil Mills Co. is reported as negotiating with Boston capitalists relative to the establishment of a cotton mill, the proposition being to organize a company with capital stock of \$500,000.

The Board of Trade of Bristol, Tenn., has completed arrangements for the organization of the company lately mentioned for knitting hosiery. Philadelphia parties will furnish the capital and manage the enterprise.

Mr. Sumner B. Sargeant of Charlotte, N. C., recently mentioned as proposing to organize a cotton-mill company, will capitalize the enterprise at \$100,000, and probably the equipment will be 5000 spindles for manufacturing cotton yarns.

The John E. Smith Cotton Manufacturing Co. of Thomson, Ga., is reported as having decided to double its present plant of 12,000 ring spindles and 350 looms, operated by steam power, awarded contracts for the machinery and engaged R. C. Bibberstein of Charlotte, N. C., as engineer in charge.

The Crystal Springs Bleachery Co. of Chickamauga, Ga., has awarded contract to Messrs. Adams & Schneider of Chattanooga, Tenn., for construction of the main bleachery building, 80x470 feet, one, two and three stories high, to cost about \$50,000. Details of the plant have been reported heretofore.

To Manufacture Pulp Boards.

Another manufacturing industry is to be added to the several important plants now operating at Roanoke Rapids, N. C. It will be equipped for the manufacture of pulp boards and specialties by the Roanoke Fiber Board Co., which has just been incorporated with a capital stock of \$125,000 by Messrs. Howard A. Edwards of Roanoke Rapids, Lewis F. Houpt of Chicago, and Joseph H. Wallace of New York. The company has not chosen its managing officers or engineer in charge, but Mr. Wallace can be addressed for the present; offices in Temple Court Building, New York city. He is inviting proposals for duplex and triplex pumps, Jordan engines, 125-horse-power engine, 125-horse-power return-tubular boiler, and various paper-mill machines.

COTTONSEED

India's Cottonseed.

The sending of a sample lot of cottonseed from British India to North Carolina for chemical tests and experiments was mentioned in the September 14 issue of Daily Consular and Trade Reports. The Bureau of Manufactures is now able to announce the results of this examination into the value of the cottonseed of India in relation to its utilization by the establishment of oil mills in that country. The following letter from E. W. Thompson, district manager of the Southern Cotton Oil Co., addressed to Mr. D. A. Tompkins of Charlotte, N. C., to whom the seed was sent, is self-explanatory:

"I received from you a sample of about two pounds of cottonseed from India sent you by the Department of Commerce and Labor. I note the request from the Department for samples of oil made from these seed. You understand, of course, that I could not make oil in the usual manner from such a small quantity of seed. The best that can be done is to extract a little oil in the laboratory, and this oil would not completely determine the value of the seed for the usual processes. If you can obtain as much as a ton of this seed I will be glad to make a complete milling test and report results. In the meantime I have had a careful analysis made in our laboratory, and have sent you full copy of the result, together with a parallel analysis of average American upland seed. The principal features are as follows:

	American.	India.
Weight of seed (grams).....	11.9	4.8
Per cent. of meat.....	55.0	44.4
Per cent. of hulls.....	45.0	55.6
Per cent. of oil.....	21.4	16.0

"It is not possible to forecast by this analysis what the exact difference would be in actual milling by American methods, but I think a fair estimate would be as follows, assuming the present average yields and values of products and omitting linters (which was not determined in analysis):

	American.	India.
44 gallons oil at 35 cents per gallon..	\$15.40	
800 pounds meal at \$1.25 per 100 pounds.....	10.00	
650 pounds hulls at 30 cents per 100 pounds.....	1.95	
Total.....	\$27.35	
33 gallons oil at 35 cents per gallon..		\$11.55
600 pounds meal at \$1.25 per 100 pounds.....		8.00
900 pounds hulls at 30 cents per 100 pounds.....		2.70
Total.....		\$22.25

"This table would indicate the milling value of India seed \$5.10 below the American, i. e., say, 18 per cent."

Southern Saws for Export.

Many Southern-made products are now exported to other countries, and the MANUFACTURERS' RECORD is advised that the Southern Saw Works of Atlanta, Ga., is preparing to market its saws in foreign markets. The company has a large and modern plant which is now supplying an extensive demand throughout the South and other parts of the country, and it intends establishing a foreign trade. Negotiations are now in progress for an agency in St. Petersburg, Russia, and the management is prepared to correspond relative to other foreign agencies. The Southern Saw Works manufactures solid-tooth saws, inserted-tooth saws, shingle saws and collars, saw mandrels, side files, saw sets, hammers, anvils and other saw tools.

In 1906 the coke production of Alabama was 3,034,501 short tons, an increase of 457,515 tons over 1905; of Tennessee 483,428 tons, an increase of 15,336; of West Virginia 3,713,514 tons, an increase of 312,921 tons.

RAILROADS

JOPLIN & PITTSBURG.

Extension of An Electric Street and Interurban Railway Rapidly Progressing.

Concerning the work which is being done for the Joplin & Pittsburg Railway Co. of Joplin, Mo., the MANUFACTURERS' RECORD is officially informed that A. L. Register & Co., 112 North Broad street, Philadelphia, who have the contract to build about 50 miles of extensions, now have under construction 25 miles of interurban electric railway between Pittsburg, Kan., and Joplin, Mo. They are also building six miles between Scammon, Kan., and Mineral, Kan., besides 10 miles of street railway in Joplin. A branch from Pittsburg, Kan., to West Curranville, Kan., about five miles, is also to be built by the firm, as well as another five-mile branch, the exact route of which is not yet determined.

The Joplin & Pittsburg Railway Co. purchased of the Pittsburg Railway & Light Co. 32 miles of electric railway operating in the Cherokee coal field district of Kansas, and that forms the nucleus of its system.

All the materials for the new line, including ties, rails and other track material, bridges, all overhead materials, etc., are purchased and upon the ground. The grading is well under way and will be completed in 30 days, and it is expected to have cars in operation over the interurban road and over the Mineral branch by January 1 and over the rest of the line in the spring.

Materials were purchased as follows: Rails and all fittings from the Cambria Steel Co.; car bodies from the Jewett Car Co., Newark, Ohio; substation equipments from the Westinghouse Electric & Manufacturing Co.; electric equipment of interurban cars from the Westinghouse Company, and for street cars from the General Electric Co.; copper wire from the American Electrical Works, all other wire and track bonds from the American Steel & Wire Co. Ties (all standard white oak) from various dealers.

A. L. Register & Co. have the entire contract for the construction and equipment of the road.

The officers of the railway company are Joseph J. Heim, president and director, Kansas City, Mo.; Wm. W. Calhoun, vice-president and director, Carthage, Mo.; John A. Presscott, secretary-treasurer and director, Kansas City, Mo.; D. L. Robinson, assistant secretary, assistant treasurer and director, Buffalo, N. Y., and P. P. Crafts, general manager, Pittsburg, Kan.

MACON RAILWAY CHANGE.

New Interests Now in Control—Extensions in Contemplation.

A report from Macon, Ga., announces a change of control of the Macon Railway & Light Co. It is stated that J. H. Fall of Nashville, Herman Myers and Sego Myers of Savannah, S. Guthman, J. H. Hertz, Henry Horne and W. W. Osborne transferred the property to W. J. Massee, John T. Moore and others, and that the following officers have been elected:

W. J. Massee, president; Jacob S. Collins, first vice-president; M. Felton Hatcher, second vice-president; J. W. McFarland, general superintendent; J. E. Jaudon, secretary and treasurer; Roland Ellis, general counsel.

Mr. John T. Moore, referring to his connection with the company, is quoted as saying that he is a large stockholder but not a director, and he will endeavor to give to Macon an efficient street railway and light service with a reduction of rates; also that the purchase price of the prop-

erty has been paid. The new directors on the board are Messrs. Massee, Hatcher, F. B. Stubbs, J. N. Neel, A. T. Small and M. H. Massee of Macon and J. C. Walker of Marshallville. The hold-over directors are Messrs. Collins of Savannah, Leon S. Dure, T. J. Carling, Morris Happ and E. G. Harris of Macon and Jacob Paulson of Savannah. Mr. McFarland, the superintendent, has been in similar positions in Savannah and Chattanooga.

The company proposes to make some extensions.

It is interesting to note in this connection that W. J. Massee is president and John T. Moore is secretary and treasurer of the Interurban Construction Co., organized some time ago to build electric railways between Atlanta, Macon and Albany, Ga.

Greenville to Bonham.

Mr. J. T. Jones, chairman of the executive committee for the proposed Interurban Railway from Greenville, Texas, via Wolfe City to Bonham, Texas, writes from Greenville to the MANUFACTURERS' RECORD thus:

"The movement is now in its incipency, and at present we have only a voluntary association composed of bankers and business men of the three cities to promote the enterprise and get it into tangible shape. The entire matter is left—by the original subscribers to the articles of agreement—to an executive committee of 11 gentlemen with myself, who as chairman of the general organization, as chairman of the executive committee, and J. Riley Green, our county clerk, who is secretary of the general organization and member of the executive committee. The latter committee are T. R. East, wholesale grocer; J. B. Murphy, president of the Greenville Ice Co.; G. H. Collins, hardware man; Y. O. McAdams, president of the Greenville Bank & Trust Co.; J. Riley Green, clerk of Hunt county, Texas, and myself, all of Greenville; D. W. Sweeney, cashier of the First National Bank of Bonham; J. W. Russell, cashier of the Fannin County Bank; J. C. Saunders, president of the cotton mill at Bonham, and Zac Smith, capitalist, all of Bonham; J. H. Blocker, cashier of the Wolfe City National Bank; J. J. Knowles, grocery merchant, and J. D. Harrell, dry goods merchant, all of Wolfe City.

"The contract will be let next week to a civil engineer to survey and locate the line. We apprehend that it will be some 60 or 90 days yet before he can complete his work, and as soon as this is done the company will incorporate, and it is our present intention to begin the construction early next spring.

"The road will traverse one of the richest and most populous sections of Texas, and a territory without a railroad or transportation facilities, besides connecting the cities of Greenville, with a population of 12,000 and nine railroad outlets; Wolfe City, with a population of 3500 and four railroad outlets, and Bonham, with a population of 8000 and three railroad outlets. The length of the proposed line will be about 35 miles, and in addition to the main line we expect to have local systems in the three cities."

Georgia Southern & Florida.

The thirteenth annual report of the Georgia Southern & Florida Railway Co., covering the fiscal year ended June 30, 1907, shows gross earnings from operation \$2,273,345, increase \$328,399; operating expenses and taxes \$1,880,209, increase \$360,549; net earnings from operation \$393,135, decrease \$32,150; total income \$408,715, decrease \$35,149; interest on funded debt, \$270,050; interest on equipment obligation, \$20,389; balance of income over charges \$118,275, decrease

\$41,883. After the payment of dividends the balance carried to the credit of profit and loss was \$29,875, decrease \$52,723; total balance to the credit of profit and loss \$683,970, increase \$12,000; total mileage operated, 395 miles.

The company has purchased during the year 6 locomotives, 500 flat cars, 4 express cars, 2 passenger cars and 1 combination baggage and mail car. The equipment now consists of 54 locomotives, 55 passenger trains cars, 3121 freight train cars and 17 road service cars. The company also relaid some of its track with heavier rail and put in the track a large number of new crossties and switch ties, while several trestles were repaired or rebuilt. Some side-tracks were also constructed. A new depot was built at Lake Park, Ga.; a freight depot at Valdosta, Ga., was completed. A new warehouse has also been constructed there, and a new passenger station is being built. There were some improvements to the general office building at Macon, Ga., while other buildings were repaired at various points.

Forest products constituted over 47 per cent. of the tonnage carried by the company, and agricultural products over 20 per cent. Manufactured articles composed more than 23 per cent.

Baltimore & Ohio Report.

The annual report of the Baltimore & Ohio Railroad Co., which is the eighty-first issued by that corporation, covers the fiscal year ended June 30 last and shows gross earnings for the system amounting to \$88,552,924, increase as compared with the next preceding year \$6,044,205, while it is more than \$16,000,000 greater than the gross earnings of 1905. The expenses were \$59,032,027, net earnings \$29,520,897. These figures include the Baltimore & Ohio Southwestern Railway and other controlled or affiliated lines, amounting to 4462 miles.

The Baltimore & Ohio Railroad Co. proper, with 4006 miles, shows gross earnings \$82,243,921, increase \$4,851,865; expenses \$54,880,090, increase \$5,364,869; net earnings from operation \$27,363,830, decrease \$513,004; gross income \$31,398,847, decrease \$125,782. After the payment of interest, taxes, dividends and an appropriation for construction, improvement, etc., there was left a surplus of \$7,480,384 for the year, which was credited to the profit and loss account, making net amount to the credit of profit and loss \$19,739,542. The percentage of expenses to earnings was 66.73, an increase of 2.75.

The company continued its policy of improving and adding to its track and other properties to meet the demands of increased traffic. There was built 5 miles of main track, 34 miles of second track, 11½ miles of third track, 7 miles of fourth track and 77 miles of sidings. There were some additions to equipment during the year, including 250 freight cars, and the total equipment now amounts to 1951 locomotives, 1176 passenger cars, 83,500 freight cars and 2964 service cars.

St. Louis Southwestern's Year.

The St. Louis Southwestern Railway Co. has issued its sixteenth annual report, which covers the fiscal year ended June 30, 1907. The figures show remarkably large increase in the net earnings. The gross earnings were \$10,553,135, increase 17.39 per cent. as compared with the preceding year; operating expenses \$7,196,102; net earnings \$3,357,032, increase 46.59 per cent.

President Edwin Gould says to the stockholders: "These excellent results may be attributed to the healthy crop and business conditions existing in the Southwest during the past year, creating an unprecedented traffic movement, and also to

the policy of steadily improving your property with respect to both the roadway and equipment, thereby making it possible to operate the same more efficiently and economically."

Mr. F. H. Britton, vice-president and general manager, in his section of the report makes detailed mention of the work done by the company during the year in improving and extending its facilities and also in handling the large amount of traffic which came to the railway. He says that the agricultural and industrial development of the territory served by the company has been very satisfactory and immigration has continued. Many new commercial enterprises have located along the line. General business throughout the Southwest is in a healthy condition, and an improved traffic movement may be anticipated for the ensuing year.

Appointments.

J. M. Parker, general manager of the Arkansas, Louisiana & Gulf Railway, which is under construction by the Southern Development Co., office at Monroe, La., announces the following:

Mr. E. T. Bond, chief engineer, will have charge of all engineering corps and all contractors engaged in grading, bridge work, etc.; also maintenance of way on all constructed road; headquarters at Bastrop, La.

Mr. W. J. Hillyer, superintendent, will have charge of all road and bridge material, tracklaying and operating department; headquarters at Monroe, La.

Mr. L. E. Smart, auditor; headquarters at Monroe, La.; Mr. V. G. Savage, assistant auditor.

Mr. E. G. Hammock, paymaster, Bastrop, La.

Mr. W. S. Moody, tie superintendent, will have charge of the work of providing crossties and switch ties as may be required; headquarters at Monroe, La.

Messrs. Stubbs, Russell & Theus are general attorneys in Louisiana; headquarters at Monroe, La.

Mr. E. G. Hammock is attorney in Arkansas, with headquarters at Hamburg, Ark.

Pushing On to Bessemer.

President H. M. Atkinson of the Atlanta, Birmingham & Atlantic Railroad, who has taken charge as general manager of the line, has returned to Atlanta after an inspection of the road and is reported as saying that the line will be completed soon and trains operated into Talladega, Ala.; also that track has been laid on the Atlanta branch to a point within 31 miles of Atlanta, and that the track will enter that city by the last of November.

Mr. George Dole Wadley, second vice-president of the company, who has heretofore been general manager, is now devoting his entire time to the construction of the road, in order that it may be completed as soon as possible.

It is further stated that 1700 freight cars ordered this year will be delivered to the road not later than November 15.

The efforts of the company are being directed to complete the line as far as Bessemer, Ala., without delay, in order to connect up with the large coal and iron mines purchased by the interests which are behind the road. The completion of the line to Talladega will give the company 378 miles of track, which will finally reach Birmingham, Ala.

The Llano Estacado Railroad.

Mr. W. M. Massee, Floydada, Texas, writes the MANUFACTURERS' RECORD that the terminus of the proposed Llano Estacado Railroad for the time being will be at Floydada, and its direction will be northwest across a rich level prairie. It

will connect at a point about 30 miles from Floydada with the Canyon City-Plainview branch of the Santa Fe system. On account of the level land and no rock it is expected to have some 30 miles of road in operation within 10 months. The company is not yet ready to let contracts.

W. M. Massie is president and general manager at Floydada, and A. B. Axtell is chief engineer at Canyon City, Texas. The other officers and directors are Arthur B. Duncan, vice-president; W. T. Montgomery, treasurer; R. C. Scott, secretary; R. C. Andrews, general solicitor; A. D. White, E. C. Henry, J. D. Starks, R. A. Childers, A. C. Bowers, C. Surginer and W. W. Nelson, all of Floydada, Texas.

HARRIMAN MAY HAVE IT.

Central of Georgia Railway Said to Have Again Been Sold.

A report in the New York *Sun* says that Oakleigh Thorne, president of the Trust Company of America, has made the statement that he is no longer interested in the Central of Georgia Railway, having sold his shares in that company, control of which he and Marsden J. Perry purchased last spring from the Southern Railway, which then controlled the line. He declined to name the purchaser of his interest in the property, but did state that he had not sold it to the Rock Island system or those controlling it. It is further surmised that E. H. Harriman is the purchaser, inasmuch as the Illinois Central is building to Birmingham, Ala., and an outlet to tidewater on the Atlantic coast over the Central of Georgia Railway would be valuable to it.

Betts Lumber Co.'s Railroad.

Mr. W. Loring Lee of Lee & McLellan, civil engineers, Sumter, S. C., writes the MANUFACTURERS' RECORD confirming the report that he has been surveying for the Betts Lumber Co. a railroad, or tramroad at present. Continuing, he says:

"The Betts Company tramroad is already located and built from its mill on the Wilmington, Columbia & Augusta Railroad (Atlantic Coast Line) about three miles east of Sumter in a southeasterly direction about 12 miles to a point near Black river, in Sumter county, South Carolina. This road I have been extending for it to other timber tracts owned by the company. The road is not a chartered line, nor is its construction being let by contract. The maximum grade is 1 per cent. and the maximum curvature 2 degrees on the portion that is being built."

Rock Island Improvements.

An officer of the Rock Island system informs the MANUFACTURERS' RECORD that the amounts reported in a press dispatch as being spent for improvements at Little Rock, Ark., and other points are larger than what is really being done. Continuing, he says: "At Little Rock we are building only four storage tracks; at Winnfield we will have some terminal building and a yard that will cost about \$150,000; at Eldorado \$250,000. Mr. H. Dalhoff of Little Rock has the contract for grading at Little Rock and Winnfield. Contract for building not let. No contract let yet for Eldorado. At Winnfield we are to put up a 10-stall roundhouse. Managing officers are Rock Island officials. H. G. Clark, district engineer, is in charge."

Muskogee to Fort Smith.

Mr. S. M. Rutherford, one of the incorporators of the Falls Construction Co., writes from Muskogee, I. T., to the MANUFACTURERS' RECORD that the company was organized for the purpose of building a railroad from Muskogee to Fort Smith, Ark. Nothing further than preliminary matters have been taken up as yet. Work will not begin before the first of the year other than preliminary surveys, etc.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

To Develop Louisiana Cypress.

A report states that the Cheney Lumber Co. of Monroe, La., which recently incorporated and purchased about 48,000 acres of cypress timber lands, together with a quantity of oak and gum and about 125,000,000 feet short-leaf pine in the vicinity of Monroe, has begun the construction of a modern sawmill to develop the property. It is understood that the plant under construction consists of a nine-foot Allis-Chalmers band mill with a Mershon gang saw, and will have a daily capacity of 100,000 feet of lumber. Shingle and lath mills will be installed, but it is stated that work on these will not be started at present. The sawmill structure will be two stories high, with concrete foundations, the boiler and engine rooms to be on one side and the shingle and lath mill on the other. A 30-room hotel of modern design has already been erected, together with a number of dwelling-houses, and construction on a dam to be 6000 feet long is in progress. Officers of the Cheney Lumber Co. are Messrs. Charles E. Cheney, Alpena, Mich., president and general manager; H. P. Cheney, Alpena, vice-president, and G. B. Haynes, Monroe, La., secretary and treasurer.

Valuable Timber Lands Bought.

A dispatch from Bedford City, Va., states that Messrs. Crane, Lakin & Co. of Terra Alta, W. Va., have purchased from J. H. Steaver of Manassas the large tract of timber land in Bedford county known as the "Big Survey." The property consists of about 8000 acres, and includes Big Onion, Little Onion, Headforemost, Dividing Ridge, Bryant's Ridge and Big Swamp mountains of the Blue Ridge chain. It is said to be heavily timbered with the original growth of yellow poplar, chestnut, oak, hickory, hemlock, yellow locust, etc., which the company will develop. A general utility plant for sawing the available timber, manufacturing excelsior and extracting oils will probably be installed either at Bedford City, on the Norfolk & Western Railway, or at Big Island, on the Chesapeake & Ohio. A tramroad will be constructed from the plant to the point of shipment, and L. L. Brown of Bedford City has been engaged to make preliminary surveys. In the development of the timber it is said to be the purpose of the company to utilize the hardwoods for manufacturing lumber, the soft woods, including white poplar, white walnut, etc., for excelsior, and the birch and sassafras trees for manufacturing oils.

Erecting Large Mill.

The Smith-St. John Lumber Co. of Parkersburg, W. Va., recently incorporated with capital stock of \$500,000, is reported to have purchased about 27,000 acres of heavily-timbered land near Wisner, La., where it has begun the erection of a large sawmill. It is also reported as intending to erect dwellings for its employees and to construct a railroad to facilitate the development of the property. Messrs. Geo. Bean of Wisner, M. A. St. John, Seymour, Ind.; R. M. Smith, J. H. P. Smith and J. C. West, all of Parkersburg, are interested in the enterprise.

Location for Barrel Factory.

The MANUFACTURERS' RECORD is informed that a slack barrel and heading factory is needed at Des Arc, Ark.; that a location on river and railroad is available, and that plenty of timber is obtainable in the Des Arc section. Manufacturers who will consider building such a plant are

invited to address Emmet Vaughn, president of the Des Arc Bank & Trust Co.

Lumber for Railway Construction.

The J. R. Ricker Company of Waco, Texas, is in the market for 100,000 6x8-8 80 per cent. yellow-pine ties, and 2375 cedar or chestnut telephone poles, 30s, 35s and 40s, six-inch top; also bridge timber, piling, bolts, washers, etc. This material is to be delivered within 60 days, and quotations must be f. o. b. Texas common points.

In Market for Cooperage.

The John Hoffer Flouring Mill Co. of Harrisburg, Pa., states it is always in the market for No. 1 slack-barrel cooperage, and is ready to correspond as to purchase of No. 1 oak staves and No. 1 oak and hardwood heading.

Lumber Notes.

The steamer Mariana cleared from Norfolk, Va., last week with a cargo of hardwood and cotton, the former valued at \$70,000.

The new lath and box factory of Portman & Randall at Ovett, Miss., has been completed, the daily capacity of the plant being 30,000 laths.

Messrs. G. T. Ross, J. E. Thornton and associates have incorporated the Lockwood Lumber Co. of Pelahatchie, Miss., with a capital stock of \$100,000.

It is announced that the Kirby Lumber Co. of Houston, Texas, beginning November 1, will reduce the running time of its 13 mills in East Texas to four days per week.

The Retail Lumber Dealers' Association of West Tennessee-Kentucky has issued a program for its second semi-annual convention to be held in the Stovall Building, Jackson, Tenn., on October 26.

The Lewis Lumber & Manufacturing Co. of Detroit, Mich., operating sawmills in the vicinity of Hattiesburg, Miss., has secured a contract for 2,500,000 cross-arms, involving about \$200,000.

The Georgia and Florida Sawmill Association will hold its next meeting at the Windsor Hotel, Jacksonville, Fla., on October 29 to consider recommendations made by the delegates to the lumber conference in Philadelphia in September regarding the 1905 inspection rules, and for the consideration of other subjects.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

Decorative Materials for Buildings.

D. D. Audicarie, 28 Babooram Deals L., Bowbazar, Calcutta, India:

"I am for the present interested in forming business relations with the best American manufacturers of decorative materials, viz., enameled tiles, ceilings, wall hangings, glasswares and general metallic art wares for the decoration of churches and public buildings. I shall accordingly thank you if you will please bring me in direct touch with such manufacturers as shall furnish me with prices, catalogues and lowest export terms of trade." (This correspondent refers to J. C. Edwards, tile manufacturer, Ruabon, England; London Tablet Co., Sydenham, England, and Charles Carter & Co., Poole, England, as to his reliability.)

The Southern Railway Co. announced the appointment of H. S. Du Val commercial agent at Augusta, Ga., vice C. E. Gay, Jr., resigned to engage in other business.

MINING

Clinchfield Coal Corporation.

In its issue of September 12 the MANUFACTURERS' RECORD presented a letter from President John H. Winder of the Clinchfield Coal Corporation, which owns 300,000 acres of coal land in Southwestern Virginia, stating the purpose of the company to develop sufficient territory in Russell and Dickenson counties to produce an annual minimum of 2,000,000 tons of coal by January 1, 1909. In connection with the development of this property, for which about \$1,250,000 will be expended, it may be stated that the company is providing dwellings and other facilities at Dante, Va., for its employees. These improvements include a 40-room hotel, which has been completed; 1500 four and five-room dwelling-houses under construction, to be equipped with electric-light fixtures, sanitary plumbing, water, etc.; a school building to accommodate 200 pupils, already erected, and two churches, a hospital and library building to be erected. An electric-light and power plant has also been installed, while a water-works system is under construction and a heating plant is contemplated.

Export Pratt Coal Co.

Particulars have been received by the MANUFACTURERS' RECORD as to the Export Pratt Coal Co., recently reported incorporated with a capital of \$6000 at Birmingham, Ala. The company has 320 acres of land on the Louisville & Nashville Railroad between the Warrior rivers, carrying three seams of steam and coking coal, which will be developed, shipments of 100 or more tons daily to begin within 60 days. It is stated that there are three seams, the Pratt and American being drift propositions of 36 and 42 inches, respectively, and the Big seam running six to nine feet. Erection of coke ovens is not contemplated at present. The company has organized with A. M. Hobson, president; W. H. Soper, vice-president, and S. H. Tuck, secretary-treasurer. Offices are in the Brown-Marx Building, Birmingham, with the Hobson Coal & Coke Co., of which Messrs. Hobson and Tuck are, respectively, president-treasurer and vice-president.

New Haven Coal & Coke Co.

The MANUFACTURERS' RECORD has received authentic information relative to the plans of the New Haven Coal & Coke Co., recently incorporated with a capital stock of \$125,000 by capitalists of Uniontown, Pa. The company has purchased between 2000 and 3000 acres of coal land near New Haven, in Mason county, West Virginia, and is making arrangements to develop the property. It is intended to sink a shaft and probably erect a modern coal tippie on the Ohio river to facilitate shipments by water as well as rail transportation. The company desires to sell its bonds to the extent of \$100,000, and will begin the construction work on its plant when these have been placed. Its officers are Messrs. Jacob Harris, president; J. T. King, secretary and treasurer, and Charles S. Gause, general manager, 81 Gallatin avenue, all of Uniontown, Pa. Mr. Gause will have charge of the construction of the plant.

Arkansas Lead and Zinc Developments.

Among the companies now developing lead and zinc-ore deposits in Arkansas is the Arbuckle Mining & Milling Co. of Binghamton, N. Y., and Imboden, Ark. This company will operate a 200-ton concentrating plant for lead and zinc ores being mined at Calomine, Ark., five miles west of the Strawberry river, where the

company is building a water-power-electrical plant which will transmit 525 horse-power by electricity to the concentrating plant. A masonry dam on concrete foundation is being constructed and the electrical machinery and transmission lines are wanted. Engineer in charge, E. S. Merkle, offices at Imboden, Ark., invites the proposals. Next year the company intends building at Imboden a dam to develop 800 horse-power for transmission by electricity. Messrs. D. A. Estill and W. H. Vaughn are president and general manager of the company; offices at Imboden.

To Develop Tennessee Manganese.

Manganese deposits near Del Rio, Tenn., will be developed by the Del Rio Mining Co., which incorporated last week with a capital stock of \$50,000. Arrangements have been made to establish a plant, erect boiler and engine houses, etc., the buildings and machinery to cost about \$10,000. The daily production will be 50 tons of crude and ground manganese. The company's officers are Warren B. Wheeler, president; Joseph N. Drew, vice-president and treasurer, and John N. Adams of Del Rio, general manager and engineer in charge. Principal offices at 79 Milk street, Boston, Mass. The company is in the market for second-hand steam pumps and piping, three, four, five and six-inch sizes.

Will Develop Virginia Coal.

A dispatch from Fayetteville, W. Va., states that A. D. Harrah has acquired about 15,000 acres of coal lands on Levisa fork in Buchanan county, Virginia, and is organizing a company with a capital stock of \$500,000 to develop them. The property, which is said to be underlain with seams of Pocahontas coal from 5 to 12 feet in thickness, is not at present accessible to railroad facilities, but it is understood that the South & Western and the Chesapeake & Ohio railroads are both being extended in that direction. Among others interested in the enterprise are Dr. J. B. Robbins, G. H. Caperton, L. Prichard, C. W. Dillon, P. M. Snyder and R. T. Hubbard.

Mining Notes.

Messrs. J. M. Lang & Co. of Savannah, Ga., report shipments of phosphate rock through the port of Savannah during September at 7250 tons.

The Adams Coke Co. of Sutton, W. Va., has incorporated with a capital stock of \$300,000 and has purchased 6000 acres of coal lands in Braxton county for development. Incorporators of the company are J. B. Adams, Ella C. Adams, E. D. Miller, Bessie F. Miller, Edward Snyder, C. W. Adams and Edna B. Areford, all of Uniontown, Pa.

The Calumet Coal & Coke Co. of Fairmont, W. Va., has incorporated with a capital stock of \$500,000 to develop coal mines and manufacture coke at Powell Station, in Marion county, West Virginia. Among its incorporators are Messrs. C. D. Eddy, R. M. Pillmore, Charles C. Benner, H. E. Loomis, Akron, Ohio, and William J. McFarlin, Barborton, Ohio.

Woodworking Plant Contemplated.

Mr. C. A. Lucas of Valdosta, Ga., contemplates the establishment of a plant for manufacturing spokes, handles, trunks or other wood articles, and invites correspondence as to details. He asks manufacturers to send data as to the industries engaged in this class of manufacture and the prospects for such a plant in the Valdosta territory, together with estimates on equipment of machinery needed.

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\$4 a year, or six months for \$2.

MECHANICAL

Electricity in the Home.

As a leading feature of its exhibit at the Jamestown Exposition the General

of necessary utensils, all electrically operated. These are arranged on a dark oak sideboard, and include an electric oven, grid, broiler, toaster, teakettle, water heater, frying pan, etc. The dining-room is also trimmed in the mission style, and

for the exhibition of the electrical cooking devices, for the display is in charge of competent young ladies who make practical demonstrations with the devices at all times of the day for interested visitors. Guests are invited in to inspect the vari-



ELECTRIC DINING-ROOM EXHIBIT.

Electric Co. of Schenectady, N. Y., is showing the latest improvements in electric cooking utensils and other domestic appliances electrically operated. A portion of the company's space in the Ma-

with its dark mission furniture, pretty rugs and pictures, etc., it presents a particularly inviting appearance, while from a handsome mantel the luminous radiator sends out its cheering light and heat.

ous utensils and have their features explained to them and then to make the demonstration more real and practical they are invited into the dining-room to partake of some refreshments prepared on



ELECTRIC KITCHEN EXHIBIT.

chinery and Transportation Building has been so constructed as to represent a model electric kitchen and dining-room. The electric kitchen is finished in mission style and contains a complete equipment

On a daintily-spread table in the center of the room are an electric coffee percolator and chafing dish, both ready for service. These rooms are not arranged, however, merely for an ornamental setting

several of the electrical utensils. You wait but a few minutes when from the electrical oven come hot biscuits or from the electrical grid some hot cakes, while almost instantly the electrical coffee per-

colator supplies a cup of delicious coffee. Then may follow appetizing dishes prepared on the electric chafing dish, a steak or a fish done to a turn on an electrical broiler or some tea and toast; in fact, the demonstration convinces one that there is

position is generated in Norfolk, eight miles away, by three 3000-kilowatt Curtis steam turbine units. This power is generated at a pressure of 11,000 volts and is transmitted at this potential to the substation, where it is stepped down for

Manchester, England, to introduce their most ingenious single-thread testing machine, made under the Moscrop patent. This device has had a marked success in England, and we see no reason why American manufacturers should not find it

quick method of single-yarn testing would enable a mill manager to test the actual conditions on any frame, or division of a frame, tracing any error immediately to its source.

It is not the lessening of strength in a whole warp or a whole invoice of yarn that makes the direct trouble to the user; it is the weakness of a small per cent., perhaps, of the product. One very weak thread in a warp can give a weaver more trouble than 50 threads which are moderately weak. A skein made up of uneven yarn might show a very satisfactory average, due entirely to the strength of a small per cent. of the yarn, this strength, however, being of little practical advantage in the further processes in which the yarn is used. The manufacturer is really and properly interested in the strength of the weakest yarns, and the weakest yarns can only be found by individual yarn tests.

This new automatic machine takes six bobbins or cops of yarn at one time, automatically seizes the yarn ends, winds off a certain length and then breaks it through spring pull, the breakage strength being directly registered on diagram paper, and the tested yarn is then cleared from the nips so as not to foul the next operation. A representation of a record illustrates a test of six cops of 20s mule-spun yarn made with Egyptian cotton. The machine has automatically registered 80 single-thread breaks from a cop, and the strength of each break has been recorded by means of a perforation in the paper. Out of the whole 480 breaks there are only 25 above 16 ounces and 27 below 12 ounces, the yarn really showing great uniformity. The twist in the yarn tested was 14 turns per inch. The skein tests showed a breakage strength of 95 pounds.

Since the accuracy of the test depends upon the tension of the springs, it is evident that sufficient accuracy in manufacture of the springs is required. This is a matter of common practice, since all spring balances are equally dependent on their mechanical structure. A spring will remain good almost indefinitely if not sprung beyond a certain percentage of its capacity. These springs are only used under a working strain equal to 50 per cent. of their guaranteed amount of elongation before straining. The springs may at any time be verified by actual weights, using a simple apparatus by which a weight is hung over a sliding pulley to apply a known pull. If inaccuracy is detected, it is readily remedied by set-screw adjustment, though when once set there is little or no variation afterwards."

The Ohio Wall Tie.

Those interested in improved building supplies are asked to note the accompanying illustration of the Ohio wall tie, one of the original designs invented by O. D. Levering, 81 North 4th street, Columbus, Ohio. This tie is made of a good grade of galvanized steel, strong and tough. The



THE OHIO WALL TIE.

corrugations enable the mortar to take hold both at top and bottom, giving a splendid bonding surface. The tie is made of No. 20 gauge steel plate five-eighths of an inch wide, and is supplied in lengths of 7, 9, 10 or 11½ inches long, as desired. The use of wall ties has increased in the past few years because of their inexpensiveness as compared with the use of headers. An illustrated booklet of this tie and other styles is issued by Mr. Levering.

The Chamber of Commerce of Charleston, S. C., is distributing 100,000 maps of Charleston harbor, giving information about the city's commercial advantages.



EXTERIOR OF ELECTRIC KITCHEN EXHIBIT.

no kind of meat, game, vegetable or other eatables that cannot be prepared by some one electrical utensil or another with less trouble and in a shorter time. The methods of operating the appliances, too, are simple as it is possible to make them. As, for example, if hot water is wanted a switch is turned and in a few minutes you have it, and without flame, dirt or smoke, and so it is with every one of the devices displayed, a turn of the switch starts the cooking. Then, too, there are a number of electrical appliances devoted to domestic uses, among them being a washing machine and electric iron, a motor-driven sewing machine, a blower set, coffee-grinder, meat-chopper, dough-mixer, buffer and grinder and automatic house pump, all of which can be seen in operation.

The space given to a display of the industrial applications of electricity also contains some very interesting machinery, among the exhibits being an automatic refrigerating plant made by the Automatic Refrigerating Co. of Hartford, Conn., and demonstrated by a portion of the rail being fitted with refrigerating liquid, so that curious visitors can feel how cold it is. In another corner stands an electrically-wound Seth-Thomas tower clock, which is always wound up automatically. Every one of the electrical devices is tested as well as shown, and its utility and domestic possibilities proven to even the most skeptical. The three accompanying cuts show views both of the dining-room and kitchen and many of the electrical cooking devices.

Adjoining the exhibit space is the substation of the exposition, equipped with three 1400-kilowatt air-blast transformers, two 500-kilowatt rotary converters, three 100-light arc lamp transformers and the switchboard, all of General Electric make. This station is also equipped with the latest type of remote control, electrically-operated oil switches. Power for the ex-

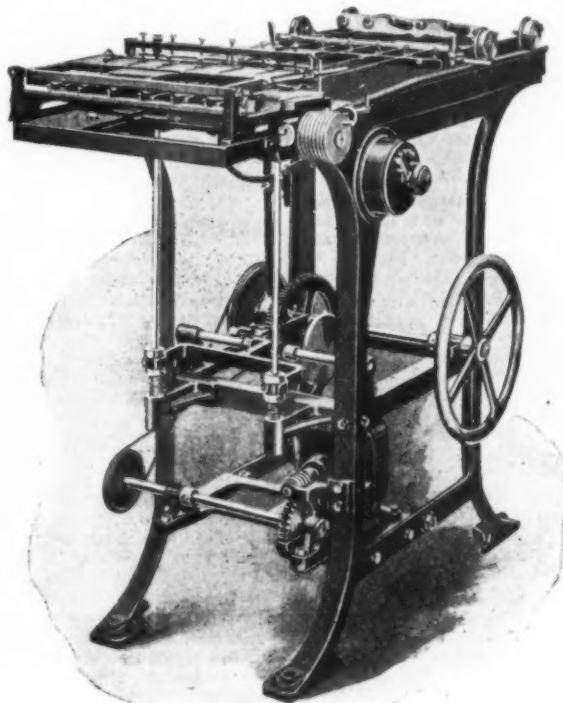
distribution. This substation is one of the best features of the company's exhibit.

About 45,000 eight-candle-power General Electric lamps are used in the decorative lighting of the exposition buildings and grounds, besides a number of 24 and 30-inch searchlights.

New Automatic Yarn Tester.

Textile manufacturers will be interested in the accompanying illustration of a new

equally important. Yarn spinners know from experience that the method of skein testing really gives but little information as to the individual yarns comprising the skein, and the single-thread testing machines in common use require wearisome attention and delay, the results also being governed more or less by the human control of the testing apparatus. While the testing of yarn in the skein may give a fair average idea of the strength of fibers



NEW AUTOMATIC YARN TESTER.

automatic yarn tester. Referring to this machine the Draper Company of Hopedale, Mass., says:

"We have arranged with Cook & Co.,

or the general conditions of manufacture, it does not enable one to closely follow the various effects of different machinery, methods or setting. An accurate and

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Alexandria, La.—Rapides Parish Police Jury has appointed a committee to secure an estimate from I. W. Sylvester, City Engineer, and advertise for bids for construction of steel bridge over Bayou Rapides at the Lynson Place.

Gadsden, Ala.—Reported that a new bridge will be built across the Coosa river. Present structure is owned by the Louisville & Nashville Railroad; W. H. Courtenay, chief engineer, Louisville, Ky., and by Etowah county.

Georgetown, S. C.—Proposals are invited for erection of steel drawbridge across Mingo creek; contract to be awarded November 20. Address J. B. Johnson, County Supervisor, at Georgetown, or Supervisor of Williamsburg county at Kingstree, S. C. (See "Machinery Wanted" column.)

Humble, Texas.—A. N. Fitzgerald, Houston, Texas, has contract at \$10,176 for construction of steel bridge over the San Jacinto river. (Mentioned in September.)

Lawton, O. T.—Comanche county will construct 26 bridges over streams in Comanche county, expending about \$156,000. Address County Commissioners.

Richmond, Va.—Contract will be awarded October 21 for the construction of reinforced concrete bridge over the Chickahominy river on road between Richmond and Ashland, Va., by Henrico and Hanover counties; Charles W. Childrey, Richmond, Commissioner for Henrico county. (See "Machinery Wanted" column.)

Sagrada, Mo.—Sagrada Bridge Co. incorporated with \$6000 capital stock by E. T. Waller, Harrison Counce, C. K. Hughes and others.

Waco, Texas.—McLennan county will build five iron bridges; contracts not awarded; J. W. Baker, County Judge.

Wharton, Texas.—Wharton and Fort Bend counties will award contract November 11 for construction of proposed steel bridge over San Bernard river; 325 feet wide; recently mentioned; G. S. Gordon, County Judge of Wharton county; D. R. Pearson,

County Judge of Fort Bend county, Richmond, Texas; H. Pennington, engineer, Theater Building, Houston, Texas. (See "Machinery Wanted" column.)

Washington, N. C.—Beaufort county will construct two bridges. Contract will be awarded November 4. Gilbert Rumley is clerk to Board of County Commissioners. (See "Machinery Wanted" column.)

CLAYWORKING PLANTS

Bainbridge, Ga.—Brick Plant.—Warren Brick Co., successor to S. J. Warren, will rebuild burned brick plant, as recently stated; plans not yet made.

Columbia, S. C.—F. H. Hyatt is reported to develop shale and fire-brick clay deposits in Richland county and establish plant for manufacturing brick and clay building material.

Rich Hill, Mo.—Booth & Hedges are making improvements to brick and tile factory, including erection of five down-draft kilns, installation of new machinery, etc. About \$11,000 has already been expended.

Weatherford, Texas.—D. Mercer and G. T. Green contemplate developing deposits of fire or potters' clay recently discovered.

Whiteville, N. C.—Oscar High will install machinery for manufacturing drainage tiling.

COAL MINES AND COKE OVENS

Birmingham, Ala.—Export Pratt Coal Co., recently reported incorporated with \$6000 capital, has organized with A. M. Hobson president, W. H. Soper vice-president and S. H. Tuck secretary-treasurer. Company reports it has 320 acres of land carrying steam and coking coals, two seams being drift propositions of 36 inches and 42 inches, respectively, and the third running 6 to 9 feet; mines to be shipping 100 or more tons of coal daily within 60 days; located on Louisville & Nashville Railroad between the Warrior rivers; erection of coke ovens not contemplated at present; offices at 547 Brown-Marx Building.

Buchanan County, Va.—Reported that a company will be organized with \$500,000 capital stock by A. D. Harrah, Dr. J. E. Robbins, G. H. Caperton, C. W. Dillon, R. T. Hubbard and others, probably all of Fayetteville, W. Va., to develop 15,000 acres of coal land in Buchanan county.

Coal Hill, Ark.—Schmidt-Blakely Coal Co. incorporated by R. M. Blakely (president), R. A. Schmidt and Charles Schmidt.

Fairmont, W. Va.—Calumet Coal & Coke Co. incorporated with capital stock of \$500,000 to develop coal properties and build coke ovens by Wm. J. McFarlin of Barborton, Ohio; C. D. Eddy, R. M. Pillmore, Charles C. Benner and H. E. Loomis of Akron, Ohio.

Fort Worth, Texas.—Elbert Winston is reported to develop coal mines in West Texas.

Jasper, Tenn.—Nunley Ridge Coal Co. is reported to develop coal mines in Marion county. It is understood that railroad facilities are being provided.

Little Rock, Ark.—Arkansas Anthracite Mining Co. incorporated with \$100,000 capital stock; H. L. Rammel, president, and Geo. B. Rose, secretary-treasurer.

New Haven, W. Va.—New Haven Coal & Coke Co., recently reported incorporated with \$125,000 capital stock, has purchased about 3000 acres of coal lands. When bonds are placed company will sink shaft and erect tipples. Jacob Harris is president, J. T. King secretary-treasurer. Charles S. Gause, 51 South Gallatin avenue, Uniontown, Pa., will probably be general manager.

Paulton, W. Va.—Sibley Coal & Coke Co. of Panther, W. Va., previously organized, is purchasing coal lands, which it leases to operators for active mining. Several thousand acres near Paulton will soon be ready for lease; main offices of company at 100 Sibley Block, Rochester, N. Y.

Rockdale, Texas.—Rockdale Lignite Coal Co. has been purchased by a new company, of which W. C. Stillman is president, F. W. Cook vice-president and S. J. Jacob secretary-treasurer. Purchasers will continue to operate the mines, shipping the output to San Antonio, Texas.

Sutton, W. Va.—Adams Coke Co. incorporated with \$300,000 capital stock to mine coal and manufacture coke by J. B. Adams, Ella C. Adams, E. D. Miller, Edward Snyder and others, all of Uniontown, Pa. Mr. Adams telegraphs the Manufacturers' Record that his company has purchased for development

6000 acres of coal land in Holly district, Braxton county.

CONCRETE AND CEMENT PLANTS

Ingersoll, O. T.—Cement, Rock, etc.—Ingersoll Cement, Rock & Building Co. incorporated with \$5000 capital stock by C. A. Bodey, W. P. McAfee, J. F. Fisher and B. B. Fees.

Memphis, Tenn.—Weber Concrete Co. incorporated with \$250,000 capital stock by Gardner P. Nash, B. E. Jarrett, L. W. Campbell and others.

Oklahoma City, O. T.—Charles W. Jones, Charlotte, N. C., contemplates establishing concrete-brick manufacturing plant in either Oklahoma City or Dallas, Texas.

Oklahoma City, O. T.—Leach Cement Co. incorporated with \$250,000 capital stock by E. I. Leach and A. O. Mitscher, both of Oklahoma City, and J. C. Fisher, Okeene, O. T.

Teague, Texas.—Concrete Plant.—Robert P. Hare & Co. will double the capacity of their concrete-manufacturing plant and have awarded contract for erection of additional buildings and the installation of machinery.

COTTON COMPRESSES AND GINS

Chatfield, Texas.—Chatfield Cotton Gin Co., W. J. Anderson, president, will rebuild gin recently reported burned; cost of building, \$500; cost of machinery, \$3000; daily capacity, 40 bales.

Clinton, O. T.—Tennessee-Oklahoma Compress Co. incorporated with \$200,000 capital stock by A. J. Welch of Clinton, John W. Young, Jr., John W. Gregory and M. F. Story, Fayetteville, Tenn. Main offices will be in Clinton.

Dewey, Miss.—Woodland Gin Co. incorporated with \$6500 capital stock by G. R. Houston, P. Rand and others.

Kennedy, Ala.—Kennedy Ginning Co. incorporated with capital stock of \$5000 by W. H. Kennedy, U. T. Probst, M. S. Weathers, W. P. Richardson and others to operate cotton gins.

Lamar, Ark.—W. A. Cazorl will rebuild cotton gin recently reported burned; will erect building 20x52 feet; cost \$600; architect, A. A. Robinson; cost of machinery \$3400; machinery purchased; daily capacity 24 bales.

Palmyra, Ark.—Farmers' Union Gin Co. incorporated with W. L. Thomasson, president; William Sackett, vice-president, and J. B. Moran, secretary-treasurer.

Russellville, Ark.—Russellville Gin, Oil & Mineral Co. incorporated with \$5,000. William Brooks is president, J. F. Sauerman vice president, J. A. Livingston secretary and R. W. Ferguson treasurer.

Wellborn, Fla.—Union Manufacturing Co. incorporated with \$2500 capital stock to establish cotton gin; will also grind corn and rice; W. L. Rogers, president; H. W. Moseley, treasurer; J. F. Carver, secretary and manager; building and machinery purchased.

ELECTRIC-LIGHT AND POWER PLANTS

Ashdown, Ark.—T. C. Aubrey, Verda, La., is interested in organization of company to establish electric-light and ice plant at Ashdown.

Big Stone Gap, Va.—Powell Valley Light & Power Co. has been organized by R. A. Ayers of Big Stone Gap and Morrison Bros., Gate City, Va. Company has purchased the Wise Electric Co.'s plant, which it will enlarge and improve.

Burlington Junction, Mo.—Burlington Junction Electric Light & Power Co., recently reported incorporated by D. T. Garrett and others, will erect one-story brick building at cost of \$1000. Machinery, including gas-producing plant, will be installed at cost of \$8000; engineer not yet engaged. (See "Machinery Wanted" column.)

Calomine, Ark.—Arbuckle Mining & Milling Co. (mentioned last week) is building dam across Strawberry river five miles from Calomine; constructed of masonry with concrete foundation; fall 10 feet; will develop 535 horse-power. The power plant will consist of generators and transformers of 6000 voltage and the electricity will be transmitted to operate 200-ton concentrating plant for zinc and lead ores being developed by the company near Calomine, five miles west of dam. Machinery and transmission lines have not

been purchased. D. A. Estill is president and W. H. Vaughn general manager. E. S. Merkle is the engineer in charge and is to be addressed at Imboden, Ark., regarding machinery, etc. Company has offices also at Binghamton, N. Y. Company will build next year at Imboden, on Spring river, a water-power electrical plant to transmit 800 horse-power. (See "Machinery Wanted" column.)

Elgin, Texas.—Mr. Graham, Smithville, Texas, proposes to establish light, water and ice plant, investing about \$60,000.

Charlotte, Tenn.—City is considering issuance of \$5000 of bonds for installation of electric-light plant. Address Mayor Taylor.

Ensley, Ala.—Ensley Street Railway Co., organized with J. J. Waller president, will construct and operate electric-light and power plant and conduct general electric-power enterprise.

Eunice, La.—Charles Lauve, Franklin, La., has secured franchise to construct electric-light plant at Eunice, expending about \$30,000. Warren B. Reid, New Orleans, La., will be associated with Mr. Lauve.

Hendersonville, N. C.—Board of Aldermen has ordered that proposals be invited for furnishing 30 or more 1200-candle-power electric lamps for lighting city streets, present contract expiring December 1. Company obtaining this contract would also have privilege of furnishing electricity for domestic and commercial use; Michael Schenck, Mayor. (See "Machinery Wanted" column.)

Imboden, Ark.—Arbuckle Mining & Milling Co. will build next spring a dam to develop 800 horse-power and provide electric plant for transmitting the power by electricity; W. H. Vaughn, general manager at Imboden. E. S. Merkle, engineer in charge, Imboden, is to be addressed regarding machinery, etc. (See "Machinery Wanted" column.)

Marble Falls, Texas.—C. H. Alexander of Dallas, Texas, who recently purchased water-power property at Marble Falls, contemplates constructing a 10-foot dam on top of present natural dam in order to provide for generating additional power, to be transmitted by electricity for operating manufacturing plants.

McKinney, Texas.—City will vote in November the issuance of \$8000 of bonds for enlarging electric-light plant. Address The Mayor.

Midland, Texas.—Midland Light & Ice Co., recently reported incorporated, will install electric-light plant; president, George D. Elliott.

Palmetto, Fla.—John A. Graham has secured franchise to furnish electric-lights.

Pioneer (P. O. Floyd), La.—Pioneer Coöperation Co. is installing electric-light plant and water-works.

Smithfield, N. C.—N. M. Lawrence, Jr., N. B. Grantham and F. H. Brooks, committee recently named, are inviting plans, specifications and estimates on construction of electric-light plant. (See item under "Water-works" in "Machinery Wanted" column.)

Union, S. C.—J. A. Brown, agent for other parties, has applied for perpetual franchise over and under streets of Union for purpose of establishing electric-light and power plant.

FOUNDRY AND MACHINE PLANTS

Baltimore, Md.—Chas. H. Birmingham (not Chas. H. Birmingham & Co., as recently stated) has purchased about six acres of land at junction of Baltimore & Ohio and Pennsylvania railroads on Washington road as site for another plant. Present plant is at 231 South Exeter street, the product being brass, bronze, copper and gunmetal castings, ingot metals, alloy copper, etc.

Birmingham, Ala.—Furnace Hot Pot Lining Co., recently reported organized to manufacture and deal in hot pots for carrying off slag and refuse, owns patent of making solid linings for hot pots. Company will grant licenses upon royalty or other consideration; president, A. C. Miller; secretary, Geo. E. Bush; general manager, A. W. Snyder; offices, 806 Brown-Marx Building.

Birmingham, Ala.—Stanford Steel Range Co., Sheffield, Ala., contemplates establishing plant in Birmingham; W. R. K. Stanford, president.

Birmingham, Ala.—Birmingham Car & Manufacturing Co. (previously detailed) has completed plant, located at North Birmingham; plant covers 11 acres and includes machine shop 65x250 feet; foundry 80x185 feet in floor space, with capacity of 160 standard

size wheels and 180 small wheels daily; power-house 45x70 feet; machine shop, foundry and pattern shop constructed of brick and steel; daily output of 10 complete logging cars, besides mining and other cars; machines are electric-motor driven, and compressed air is used for handling castings and molding; C. E. Faust, president, and T. A. Burbridge, secretary-treasurer; main office in Brown-Marx Building, Birmingham.

Bristol, Va.-Tenn.-Twin City Boiler Works, recently mentioned as proposed, has been formed and will establish plant for manufacturing steam boilers; will erect 35x80-foot building, costing \$1000, and install machinery costing \$4000; Henry Ehret and I. P. Oakes, managing officers; location, 304 8th street. All machinery not yet purchased. (See "Machinery Wanted" column.)

El Paso, Texas.-Marshall Car Wheel & Foundry Co., Marshall, Texas, is reported as contemplating establishment of plant in El Paso.

El Paso, Texas.-Griffin Car Wheel Co., Denver, Col., contemplates establishing plant for manufacturing car wheels in El Paso.

Fort Smith, Ark.-Reported that a Kansas company will establish woven-wire factory in Fort Smith. Max Hopp can probably give information.

Kansas City, Mo.-Midland Bridge Co. contemplates erecting bridge shop.

Louisville, Ky.-Monitory Scale Co. incorporated with \$15,000 capital stock by Kurtz A. Kelly, Henry Marer and Robert L. Holland.

Paducah, Ky.-James Weille, J. A. McCann, Abe Livingston, Henry Urquhart and others are interested in establishment of foundry to manufacture a patent brake shoe invented by Mr. Urquhart.

Phoenix, Va.-Sayre Bros., recently reported incorporated, is a continuation of firm of that title which since January, 1904, has been manufacturing machine and structural castings; daily capacity 15,000 to 20,000 castings; managing officers, Messrs. S. H. and C. R. Sayre.

Richmond, Va.-King Weeder Co. incorporated with \$50,000 capital stock to manufacture agricultural implements; T. J. King, president, and Warner Moore, secretary-treasurer.

Roanoke, Va.-Roanoke Iron Works, lately noted incorporated with capital stock of \$100,000, is a merger of the Rockhill Foundry & Machine Co. and the Roanoke Foundry & Machine Co., as has been stated. New company will continue operating foundry, machine shop and pattern shop. H. B. Rockhill is general manager.

St. Louis, Mo.-Ornamental Wire & Iron Co. is having plans prepared by William P. McMahon for erection of building; one story, 87x90 feet; brick and stone; cost \$7000.

ICE AND COLD-STORAGE PLANTS

Ashdown, Ark.-T. C. Aubrey, Verda, La., is interested in organization of company to establish ice and electric-light plant at Ashdown.

Beaumont, Texas.-Beaumont Ice, Light & Refrigerating Co.'s additional ice machine (recently mentioned) will have 100 to 150 tons capacity; daily capacity of present plant, 200 tons; J. E. Carroll, president; new machinery not purchased.

Bogalusa, La.-Ozone Ice Manufacturing Co. will establish 50-ton ice plant; manager, M. K. Pearce; engineer, H. P. Rucker; compression system; will erect brick building with fireproof roof; 112x48x8; cost of building, \$15,000; cost of machinery, \$25,000; machinery ordered from the Frick Company of Waynesboro, Pa. (Recently mentioned.)

Brinkley, Ark.-Jesse Sigworth and R. E. Sturgis are organizing company to establish cold-storage plant and creamery.

Dallas, Texas.-People's Ice Co. will erect cold-storage plant; brick; two stories; site 100x149 feet; artesian well will be sunk.

Elgin, Texas.-Mr. Graham, Smithville, Texas, proposes to establish ice, light and water plant, investing about \$60,000.

Hattiesburg, Miss.-Lewis Lumber & Manufacturing Co. incorporated by R. R. Akers and E. L. Russell to manufacture ice, etc. (See item under "Woodworking.")

Kansas City, Mo.-Merchants' Refrigerating Co. is considering erection of brick cold-storage building 90x117 feet. Company can be addressed care of J. E. Brady, 319 Temple Block.

Memphis, Tenn.-Memphis Cold Storage Warehouse Co. has increased capital stock from \$300,000 to \$500,000. Company will occupy five or seven-story cold-storage warehouse, 63x240 feet, previously reported to be erected by J. N. Oliver; cost about \$200,000.

Monticello, Fla.-Abe Simon & Bro. contemplate installing 15-ton to 25-ton ice plant.

Oak Cliff, Texas.-Cliff Ice & Cold Storage Co., reported incorporated in August with \$30,000 capital stock, has had plans prepared by H. A. Overbeck for erection of building; 61x140 feet; two stories high in rear; equipped with ice and cold-storage machinery, all of which has been ordered; cost \$70,000; artesian well has been drilled; contract for erection of building awarded.

Russellville, Ala.-Russellville Ice & Coca-Cola Bottling Co. incorporated to operate ice plant and bottling works by Crawford Johnson, Charles V. Rainey, R. C. Jones and W. S. Douglass; capital stock, \$15,000.

Savannah, Ga.-South Atlantic Packing & Provision Co., previously reported as being organized with \$100,000 capital, has elected W. S. Godley president, H. S. Oppenheimer secretary, Nathaniel Harrison treasurer, J. G. Nelson general manager and C. Winkler superintendent. Company will establish ice plant with daily capacity of 50 tons and handle poultry, produce and meat.

St. Louis, Mo.-Polar Wave Ice & Fuel Co. is having plans prepared by H. G. Clymer, Walnwright Building, for erection of cold-storage building; one story; 98x125 feet; brick and stone; cost \$20,000.

Tarboro, N. C.-H. T. Bryan will install ice plant with daily capacity of 20 tons.

Waycross, Ga.-Waycross Electric Light & Power Co., J. E. Wadley, manager, will install additional machinery and increase capacity of ice plant to about 50 tons daily.

IRON AND STEEL PLANTS

Cumberland, Md.-Cumberland Steel Co. has awarded contract to McClintock & Marshall, Pittsburg, Pa., for erection of building to replace plant destroyed by fire. New structure will be erected on same general plan as old building, except that it will be 43 feet longer and fireproof throughout. Machinery for plant made according to patterns and plans prepared by W. J. Munaster of the Cumberland Steel Co. is now being built and will be ready for installation when structure is completed. (Mentioned in August.)

Ensley, Ala.-Tennessee Coal, Iron & Railroad Co. does not contemplate undertaking in the near future any improvements to No. 1 furnace. A report was recently current that betterments would soon be provided for. Main offices at Birmingham, Ala.; New York offices at 100 Broadway; Frank H. Crookard, general manager.

Gadsden, Ala.-Alabama Consolidated Coal & Iron Co. has blown in No. 2 furnace, which was blown out in July for repairs; equipment has been overhauled and stack relined, etc.; daily capacity, 600 tons of iron; particulars of repairs reported previously; main office of company at Birmingham, Ala.; New York offices at 74 Broadway.

LUMBER-MANUFACTURING PLANTS

Apalachia, N. C.-Blue Ridge Lumber Co. incorporated with \$40,000 capital stock by J. U. Brown of Apalachia, George Oberne and John E. Oberne, both of Knoxville, Tenn.

Batoh Rouge, La.-Morris, Kent & Chaney are reported to build sawmill for the development of 40 acres of timber land.

Bedford City, Va.-Crane, Lakin & Co., Terra Alta, W. Va., have purchased and will develop the "Big Survey," comprising about 8000 acres of wooded mountain land in Bedford county, estimated to produce about 20,000 tons of bark. It is proposed to build tramroad and general utility plant, converting hardwoods into lumber, soft woods, such as white walnut, white poplar, etc., into excelsior, and using birch and sassafras trees for manufacturing oils. Survey of the property has been completed by A. F. McMillan of Preston county, W. Va., and L. L. Brown of Bedford county, Virginia.

Birmingham, Ala.-Krebs Lumber Co. incorporated with \$50,000 capital stock; Allen J. Krebs, president; J. Mercer Barnett, vice-president, and Al C. Garber, secretary-treasurer. Company has purchased the Barnett-Shepard Lumber Co.

Birmingham, Ala.-Lee-Ryder Lumber Co. incorporated with \$3000 capital stock; R. H. Lee, president and general manager, and J. W. Ryder, Childersburg, Ala., secretary-treasurer.

Bristol, Tenn.-American Central Lumber Co. of Central City, W. Va., is reported as proposing to build a branch mill at or near Bristol.

Charlotte, N. C.-Blackmon Wood Co. incorporated with \$5000 capital stock by W. F. J. Blackmon, J. M. McAdams and T. C. McAden.

Cleburne, Texas.-Ford-Osborn Lumber & Mill Co. has increased capital stock from \$50,000 to \$75,000.

Colbert County, Ala.-Edgefield & Nashville Manufacturing Co., Nashville, Tenn., has purchased timber lands in Colbert county at \$41,000. Timber will be shipped to Nashville and manufactured into furniture.

Concord, N. C.-Sills Lumber Co. will be incorporated by Joe M. Sills, Ed Honeycutt and John Creech to continue the enterprise of Sills & Klutz. Branch yard at Charlotte, N. C., in charge of Mr. Honeycutt. Mr. Sills is general director. Main offices in Concord.

Corpus Christi, Texas.-H. D. Taylor Lumber Co. has increased capital stock from \$50,000 to \$100,000 and changed main offices from Corpus Christi to Houston, Texas.

Lattimore, N. C.-Lattimore Lumber Co., recently reported incorporated, will establish planing mill plant for the production of rough and dressed lumber; capacity, 20,000 feet per day; North Carolina rovers a specialty; plant is located at Knightsdale; president, L. V. Lee; vice-president, J. P. Lattimore; treasurer and manager, W. F. Lattimore; principal address, Lattimore.

Louisville, Ky.-Milton-Peter Manufacturing Co. incorporated; president, T. Smith Milton; secretary-treasurer, Robert A. Peter; will manufacture lumber, hardwood and table slides; 1000 sets slides per day; jobs in yellow pine; will erect corrugated iron power-house, frame factory building and N. P. K. kilns; company constructs plant; L. A. Weideman, engineer in charge; machinery purchased.

Marion, S. C.-Wisconsin-Carolina Lumber Co. incorporated with \$300,000 capital stock; Charles E. Gill, president.

Maryville, Tenn.-John and James Post will erect sawmill to develop extensive timber lands.

Melville, La.-Announcements state that a company is being organized to purchase the timber rights on the 10,830 acres of timber land recently mentioned as having been purchased by the Labarre-Riggs Company, Ltd., R. Lee Riggs, treasurer, Patterson, La. It is stated that a single-band mill will soon be erected.

Monroe, La.-Cheney Lumber Co. has perfected organization with Charles E. Cheney, president and general manager; H. P. Cheney, vice-president, both of Alpena, Mich., and G. B. Haynes of Monroe, secretary-treasurer. Company has purchased entire holdings of Cheniere Lumber Co. and small saw mill; properties including 48,000 acres of timber land near Monroe, with gum, oak, cypress and about 125,000,000 feet of short-leaf pine timber. Purchaser has completed 30-room hotel and several tenement-houses; will install shingle and lath mills, and has begun construction of a nine-foot band mill, with gang saw; two stories; concrete foundations; daily capacity 100,000 feet. Logging plans include building of dam, 6000 feet long, object being to turn part of water from Cheniere river into the cypress-brake, thereby covering probably 40,000 acres to a depth of several feet with the water curbed by the dam and driven over another, but lower, altitude, by which means, it is stated, company can operate logging entire year. Float roads are being cut through the brakes and tributary trails, moving fallen logs to pond at sawmill.

Morrow, La.-The W. E. Caldwell Company, Louisville, Ky., manufacturers of towers and tanks, has purchased 5000 acres of timber land in St. Landry Parish, near Landry, for development. J. B. Crawford, Baton Rouge, La., is Louisiana representative of company.

Murphy, N. C.-Hwassee Lumber & Manufacturing Co. incorporated with \$10,000 capital stock; president, A. G. Deweese; manager, J. W. Fory; will erect and equip plant at cost of \$1000 for buildings and \$6000 for machinery; buildings to be of frame, 60x120 feet; capacity 10,000 feet lumber per day; architect, J. M. Barnett; engineer, W. C. George.

Nashville, Tenn.-E. A. Swain and E. F. Karmire, both of Shelbyville, Ind., contemplate establishing band-saw mill, probably in Nashville, to make a specialty of quartered-oak fitches for veneers. Messrs. Swain and Karmire will also visit Columbia, Pulaski and Dyersburg, Tenn., and Paducah, Ky., with a view of locating one or more plants.

Newport, Tenn.-Crescent Engineering Co. is estimating on the installation of water-power, planing and other machinery; contracts not awarded yet. Address purchasing agent of Crescent Engineering Co. (See "Machinery Wanted" column.)

Newton, Texas.-Newton Lumber Co. has been purchased, reorganized and incorporated with \$50,000 capital stock by Orange

(Texas) capitalists; H. B. Jackson, president; Sam C. Trimble, vice-president; G. M. Sells, secretary-treasurer; D. A. Ford, general manager, and E. L. Lester, superintendent. Plant will be improved and capacity increased.

Norfolk, Va.-Ackerly Lumber Co. incorporated with \$50,000 capital stock; H. B. Ackerly, president; A. O. Renwick, secretary, both of Cuba, N. Y., and G. D. Whipple of Norfolk, general manager.

Pelahatchie, Miss.-Lockwood Lumber Co. incorporated with \$100,000 capital stock by G. T. Ross, J. E. Thornton and others.

Prattville, Ala.-John C. Osborne and St. Louis capitalists have purchased yellow-pine stumpage near Prattville and will install circular-saw mill cutting about 35,000 feet per day, planing mill with daily capacity of about 25,000 feet, drykilns, etc.

Stone Mountain, Ga.-Reported that Vincenzo Palumbo, New York, N. Y., and Joseph Parantha, Atlanta, Ga., controlling 500 acres of land at Stone Mountain, will build sawmill and other industries in connection with colony enterprise. (See item under "Miscellaneous Enterprises.")

Vernon Parish, La.-Kramer & Co., Shreveport, La., have purchased 19,000 acres of timber land in Vernon parish and will develop the property, manufacturing staves for export.

Waycross, Ga.-Henry I. Chase, Duluth, Minn., and capitalists of St. Paul, Minn., are reported as contemplating purchase of timber lands near Waycross and erection of sawmill for development.

Wisner, La.-Smith-St. John Lumber Co., recently reported incorporated by J. C. West and R. M. Smith, both of Parkersburg, W. Va., and others, has purchased 27,000 acres of timber land near Wisner at \$300,000 and will establish lumber mill. Company will also erect employees' dwellings and construct railroad facilities.

MINING

Black Rock, Ark.-Powhatan Zinc & Lead Mining Co. is developing 445 acres of zinc and lead lands and contemplates erecting mill to enable the mine to handle its own output; S. M. Neely, president; B. J. Campbell, secretary-treasurer, both of Memphis, Tenn., and R. B. King, Pattersonville, Tenn., vice-president.

Calumet, Ark.-Arbuckle Mining & Milling Co. is now providing water-power electrical plant (see "Electric-Light and Power Plants") of 525 horse-power to transmit electricity for operating 20-ton concentrating plant for zinc and lead ores being developed by the company near Calumet; W. H. Vaughn, general manager at Imboden, Ark.; E. S. Merkle, engineer in charge, to be addressed at Imboden, Ark.

Del Rio, Tenn.-Del Rio Mining Co., 70 Milk street, Boston, Mass., recently reported incorporated, will engage in the production of ground and crude manganese; boiler and engine houses will be erected and equipped; cost of buildings and machinery \$10,000; capacity of plant, 50 tons daily; president, Warren B. Wheeler; vice-president and treasurer, Joseph N. Drew; engineer and manager, John N. Adams of Del Rio. (See "Machinery Wanted" column.)

Elkton, Va.-Metallic Alloys Co., recently organized, has purchased and will continue mining and plant of Kendall & Flick, Elkton and Lyndhurst, Va. It has installed additional power and equipment at Elkton and increased finished product from 10 to 25 tons daily; product, manganese oxide for use in manufacturing brick, tile, glass, pottery, brass, etc. J. A. Rogers is treasurer; offices at 99 John street, New York city.

Floral City, Fla.-Southern Phosphate Development Co., previously organized to develop phosphate deposits, will erect two plants, power to be supplied by an electric plant now in course of construction; S. E. Hopkins, Naugatuck, Conn., president, and John W. Pearson, Ocala, Fla., general manager.

Fort Meade, Fla.-Germofert Manufacturing Co., Charleston, S. C., will establish phosphate plant at Fort Meade.

Joplin, Mo.-Elenita Zinc Co. incorporated with \$100,000 capital stock by Frank Nicholson, J. W. Trick, J. H. Capelli and others.

Kansas City, Mo.-El Rico Mining & Milling Co. incorporated with \$10,000 capital stock by M. D. Klugrey, R. F. Haegelin, B. F. Leatherage and others.

Mena, Ark.-C. B. Baker, Kansas City, Mo., has purchased 160 acres of land at Mena and will develop slate deposits.

Point Cedar, Ark.-M. A. Elsie, W. H. Martin and Housley Bros., all of Hot Springs, Ark., recently stated to develop lead, zinc and copper deposits at Point Cedar, will in-

crease mining facilities by installation of steam hoist and pump.

Roanoke, Va.—Fellers Stone Co., recently reported incorporated, will operate stone quarry; will also manufacture lime, brick, concrete, crushed stone, etc. E. B. Fishburn is temporary secretary-treasurer.

Statesville, N. C.—J. T. Cashion is reported to develop kaolin and brick-clay deposits.

St. Louis, Mo.—Melville Zinc Co. incorporated with \$50,000 capital stock by Eugene Lumellus, Melville B. Hall, both of St. Louis, and C. S. Hollywood, Webb City, Mo.

Sulphur, I. T.—Buckhorn Asphalt Co., composed of New York and Philadelphia capitalists and W. J. Williams of Sulphur, is reported as to develop asphalt mines near Sulphur.

Webb City, Mo.—Stevison-Rogers Lead & Zinc Co. incorporated with \$150,000 capital stock by F. E. Rogers, Charles Moore, J. L. Stevison and others.

MISCELLANEOUS CONSTRUCTION WORK.

Augusta, Ark.—Levee Construction.—Dunhoff Construction Co., Little Rock, Ark., has contract to construct levee at Augusta; removal of about 50,000 yards of earth.

Austin, Texas—Retaining Wall.—C. E. Leonard, City Engineer, has completed plans and specifications for retaining wall and abutment to be erected at foot of Congress street; wall to be 40 feet high, 9 feet thick at base and 3 feet thick at top; estimated cost \$8000, of which State will pay \$2000, county \$1000 and city remainder. Contract will be awarded November 21. (See "Machinery Wanted" column.)

Austin, Texas—Dam.—Referring to current reports regarding reconstruction of the Austin dam, the following briefly states the status of the plan: Consolidated Construction Co., Jay Strickland, manager, New York, has been granted concession to rebuild the dam, the city agreeing to install electrical apparatus in power-house to be built by the company and to pay the company an annual rental for use of dam, water, etc. Company is required to keep dam in repair for a term of years. This contract is about to be signed upon certain cash deposits being made at Austin. J. G. White & Co. of 43 Wall street, New York, who have been mentioned in connection with the project, are not financially interested, but may be engaged to undertake the engineering and construction work involved.

Beaumont, Texas—Canal.—George J. McManus and associates, Minneapolis, Minn., are reported to construct new canal system near Beaumont.

Beaumont, Texas—Irrigation.—Neches Canal Co., Will Carroll, president, will expend about \$125,000 in improvements, increasing capacity of pumping plant about 50 per cent. Contract for additional pumping machinery, costing about \$30,000, is understood to be awarded, and foundation work on frame building, in which equipment will be installed, has begun. During the past year company watered 23,000 acres, and the new machinery will increase the acreage from 7000 to 10,000 acres.

Benton, La.—C. B. Wimbich has contract at 13.30 cents per cubic yard for construction of the Curtis levee in Ward 1.

Brownville, Texas—Irrigation.—Indiana Texas Land & Irrigation Co. incorporated with \$50,000 capital stock by C. M. Cooper, E. F. Rawson, W. S. Picken and others.

Brownsville, Texas—Irrigation.—Brownsville Irrigation Co. has been reorganized with Alba Heywood, president; Lon C. Hill and W. H. Stenger, directors.

Cameron Parish, La.—A. F. Lyons, Vinton, La., and J. H. Labit, Orange, Texas, owning 4500 acres of land in Cameron parish, will engage in rice cultivation; expect to have 2500 acres under cultivation next season. Water for irrigating the land will be taken from Black's bayou, an intake canal being dredged from the bayou for three miles through the marsh to high land, where pumping plant will be located. Canal will be five miles long; main office in Orange, Texas.

Carrabelle, Fla.—Dredging.—J. F. Taylor, Pensacola, Fla., has contract for dredging channel from wharves at Carrabelle to mouth of Carrabelle river with a turn basin, a distance of 5300 feet, thence to a curve at St. George's, a distance of 6000 feet. Channel will be 900 feet wide at bottom and 10 feet deep at mean low water. Work is result of an appropriation of \$60,000 for improvement of East Pass Harbor; J. M. Drummond, superintendent; George Robinson, engineer in charge. Work will begin at once.

Charleston, S. C.—Concrete Pier.—R. R. Hollyday, chief of Bureau Yard and Docks, Washington, D. C., is to open bids on Novem-

ber 16 for construction of reinforced concrete wooden-pile and timber-deck pier at Charleston Navy-yard. (See "Machinery Wanted" column.)

Charleston, W. Va.—Concrete Wall.—City will construct concrete wall for sidewalk approach to east corner of Lovell-street bridge. Contract for its erection and for grading and filling will be awarded October 29; W. A. Hogue, City Engineer; A. J. Humphreys, vice-president Board of Affairs. (See "Machinery Wanted" column.)

Little Rock, Ark.—Levee.—Wm. D. Connor, captain, engineers, U. S. A., Riegler Building, is to open bids on November 16 for constructing 248,000 cubic yards of levee work. (See "Machinery Wanted" column.)

New Orleans, La.—Heating Plant.—A. M. Lockett Company, Ltd., 533 Baronne street, New Orleans, La., has contract at \$17,700 to construct hot-water heating plant at naval station, New Orleans.

Port Arthur, Texas—Public Dock.—City Council has appointed a committee, composed of Aldermen Alexander, Drungie and Wilson, to investigate cost of excavating a slip in Lakeshore Park of same depth as channel and also cost of building a public dock.

West Point, Miss.—Drainage.—Clay County Houka Drainage Commissioners, Ben H. McFarland, secretary, Aberdeen, Miss., for constructing canal 12 miles long through Houka creek bottom. Contract will be awarded November 12. Mr. McFarland states that his section of Mississippi will have 70 miles of canals in the course of two years, draining 50,000 acres of land which cannot be cultivated without this system of ditching. (See "Machinery Wanted" column.)

MISCELLANEOUS ENTERPRISES

Alamo, Tenn.—Telephone System.—Crocket County Telephone Co. incorporated by C. H. Seales, L. B. Harvell, Dr. John F. Sanders and others.

Atlanta, Ga.—Plumbing.—Mell Plumbing Co. incorporated with \$10,000 capital stock by John L. Mell, Harry T. O'Shields and Mrs. Mollie Mell.

Atlanta, Texas—Gas Franchise.—Sulphur Oil Co., controlling gas properties in Cass county, has secured 20-year gas franchise.

Baltimore, Md.—Machinery and Supplies.—Aumen Machinery & Supply Co., 324 North Holliday street, dealers in machinery and supplies, has called meeting of stockholders to consider the issuance of \$25,000 preferred stock.

Baltimore, Md.—Contracting, etc.—Baltimore Product Co. incorporated with capital stock of \$25,000 to conduct garbage-reduction plant and general contracting by Michael T. Horner, Ensor street and Ashland avenue; Wm. J. Martin, 2006 Eutaw place; George D. Weaver, 317 National Marine Bank, Gay and Water streets; Joseph L. Smith and John I. Lewis.

Baltimore, Md.—Garbage Reduction.—Board of Awards, City Hall, has received bids from Baltimore Products Co., northeast corner Ensor street and Ashland avenue; Southern Products Co., Fidelity Building, and American Reduction Co., care of Thomas J. White & Co., 11 South Gay street, for the reduction of garbage in the city from 1908 to 1918. Bids have been referred to Joseph L. Wickes, Superintendent of Street Cleaning, City Hall, for tabulation and report.

Benwood, W. Va.—Drugs.—Gray Drug Co. incorporated with \$20,000 capital stock by William W. and Mrs. Mary Gray, both of Benwood; C. E. James M. and Mrs. Amanda Gray, Moundsville, W. Va.

Birmingham, Ala.—Land Improvement.—Union Realty Co. incorporated with W. B. Tomlin, president; W. H. Irwine, vice-president and treasurer, and G. N. Henderson, secretary.

Birmingham, Ala.—Land Improvement.—Mountain Home Land Co. incorporated with \$25,000 capital stock; Robert Jemison, Jr., president; Hill Ferguson, vice-president, and A. R. Wilkerson, secretary.

Chandler, O. T.—Cotton Company.—Halsell Cotton Co. incorporated with \$10,000 capital stock by L. R. Halsell, B. W. Reeves and G. A. Neely.

Charleston, W. Va.—Construction.—The W. D. Newsome Company incorporated with \$10,000 capital stock by W. D. Newsome, George S. Brill, W. C. Broyles and others to construct all kinds of buildings, prepare plans and specifications for buildings, etc.

Charleston, W. Va.—Gas Wells.—Washington Gas Co. incorporated with \$10,000 capital stock to drill for oil and gas by Angus W. McDonald, John S. Horan, C. C. Stover and others.

Charlotte, N. C.—Coffee Plant.—North State

Coffee Co. incorporated with \$25,000 capital stock to grind, roast and mix coffees, spices, etc., by P. L. Vance, S. A. Van Every and D. B. Gresham.

Choctaw, O. T.—Telephone System.—Choctaw City Telephone Co. incorporated by J. E. McIrvin, T. J. Bowlin and George P. King.

Cleveland, O. T.—Oil and Gas Wells.—Ozark Oil & Gas Co., recently reported incorporated with \$200,000 capital stock, will engage in production of crude petroleum and gas; E. B. Greenhaw, manager.

Columbia, S. C.—Building Company.—Carolina Building Co. incorporated with \$20,000 capital stock by L. T. Wilds, Joseph Norwood, T. C. Williams and W. H. Lyles.

Columbia, S. C.—Land Improvement.—T. C. Williams Realty Co. incorporated with \$25,000 capital stock by W. H. Lyles and T. C. Williams.

Columbia, S. C.—Land Improvement.—Columbia Realty Co. has been organized with \$100,000 capital stock. Robert Moorman is president, Christie Benet vice-president and B. R. Heyward secretary-treasurer.

Cumberland, Md.—Tannery.—Byron Tannery Co., Williamsport, Md., will not locate tannery at Cumberland, as recently incorrectly reported.

Dardanelle, Ark.—Oil and Gas Wells.—Geo. A. O'Hara and A. C. Martin, representing capitalists, are securing options on land for purpose of drilling for oil and gas.

Decatur, Ala.—Navigation.—Decatur Navigation Co. incorporated with \$10,000 capital stock by Bixby Lumber Co., Huntsville Lumber Co. and Lampkin & Thomason to operate steamboats and barges on the Tennessee river, especially for lumber handling.

Dill, O. T.—Telephone System.—Dill Farmers' Telephone Co. incorporated with \$10,000 capital stock by W. P. Ream and C. C. Hickman, both of Dill; W. C. Lerner and George L. Bishop, Cordell, O. T.

Dublin, Ga.—Park.—City will vote \$5000 of bonds for public park. Address The Mayor.

Durham, N. C.—Land Improvement.—Northeast Land Co. incorporated with \$125,000 capital stock by E. J. Parrish, E. L. Bryan and Jones Fuller.

Enid, O. T.—Construction.—Union Construction Co. incorporated with \$50,000 capital stock by John McGee, J. C. Bradley, Harry Watt and others.

Erick, O. T.—Hardware.—Bonebrake-Gillum Hardware Co. incorporated with \$10,000 capital stock by A. G. Gillum and James Gillum of Erick, J. E. Bonebrake, El Reno, O. T., and others.

Eureka Springs, Ark.—Publishing.—Ozark Publishing Co. incorporated with \$15,000 capital stock; J. Fred Bolton, president; S. L. Field, vice-president, and Giles E. Miller, secretary-treasurer.

Fairmont, W. Va.—Oil and Gas Wells.—Mississippi Oil & Gas Co. incorporated with \$10,000 capital stock by O. S. McKinney and R. O. Kendall, both of Fairmont; William A. Ohley and R. G. Quarrier, both of Charleston, W. Va., and others.

Fayetteville, Ark.—Printing Plant.—Revier Printing Co. incorporated with \$10,000 capital stock; Jay Fulbright, president; B. F. Campbell, vice-president; J. W. Phylbeck, secretary, and J. C. Reed, treasurer.

Fort Valley, Ga.—Telephone System.—Fort Valley Telephone Co. contemplates issuing \$10,000 of bonds for refunding present indebtedness and to make improvements and extensions.

Fort Worth, Texas—Grain Elevator.—E. G. Rall Grain Co. incorporated with \$40,000 capital stock by J. C. Whaley, E. G. Rall and Frank Kell.

Glen Jean, W. Va.—Oil and Gas Wells.—Chapman Oil & Gas Co., recently reported incorporated with \$50,000 capital stock by W. E. Deegans of Glen Jean, J. P. Chapman, Beury, W. Va., and others, has purchased 150 acres of oil lands in Doddridge county for development; main offices at Glen Jean.

Grafton, W. Va.—Hardware.—Grafton Hardware Co. incorporated with \$25,000 capital stock by John S. Little, J. B. Knapp, S. S. Cox and others.

Guthrie, O. T.—Oil Wells.—Portage Trail Oil Co. incorporated with \$100,000 capital stock by A. J. McMahan, Oklahoma City, O. T.; C. A. Barnholth, Akron, Ohio, and C. E. Brown, Cleveland, Ohio.

Hillsboro, Texas—Printing and Supplies.—Texas Printing & Supply Co. incorporated with \$10,000 capital stock by W. E. Jackson, Charles A. Mayfield and W. H. Kelley.

Hattiesburg, Miss.—Engineering.—Huston Engineering Co., R. C. Huston, president, will increase capital stock from \$25,000 to \$100,000.

Greenville, Ala.—Cotton.—Gulf Cotton Co.

Incorporated with capital stock of \$10,000 by J. Lee Long, A. B. Long and S. D. Long.

Houston, Texas—Telephone System.—Houston Home Telephone Co. will extend telephone system to Houston Heights and erect substation, recently noted; plans and estimates not completed; president, J. S. Slusher; secretary-treasurer, F. G. Reed; engineers in charge, McMeen & Miller, Chicago, Ill. (Called "Automatic Telephone Co." in recent notice.)

Jacksonville, Fla.—Land Development.—William H. Beers, 44-60 East 23d street, New York; Walter B. Clarkson, A. S. Hough, both of Jacksonville, and others are planning the incorporation of a company, which will probably be known as the Florida Development Association, with \$100,000 capital stock, for the development of Florida lands; offices will be maintained in Jacksonville (main office), New York and Chicago. For further information address Mr. Beers.

Jeanerette, La.—Land Improvement.—Reported that Gary's Land Improvement & Manufacturing Co. will be organized by Joseph F. Moore and Adolph Gary.

Kansas City, Mo.—Linotype Plant.—Independent Composing Co. has been incorporated with capital stock of \$25,000 to establish linotyping plant at 312 West 9th street; J. Berry of Augusta, Maine, president; Franklin Hudson, Joseph D. Havens and others of Kansas City interested.

Kansas City, Mo.—Boiler Compound and Supplies.—Mitchell Boiler Compound & Supply Co. incorporated with \$30,000 capital stock by G. W. Mitchell, N. F. Noland, H. P. Scott and others.

Kansas City, Mo.—Construction.—Mid-Continental Construction Co. incorporated with \$10,000 capital stock by J. Moechel, Roland E. Bruner, Burton Lowther and others.

Lynchburg, Va.—Transfer Company.—Long's Baggage Transfer Co. incorporated with \$25,000 capital stock to conduct baggage and passenger transfer enterprise; Herman Shultz, president and treasurer; J. Harry Long, vice-president and general manager, and J. J. Hughes, secretary.

McGehee, Ark.—Coal Chute.—St. Louis, Iron Mountain & Southern Railway, James W. Way, consulting engineer, St. Louis, Mo., is reported to build mechanical coal chute at a cost of \$14,000 and make other improvements at McGehee.

McKinney, Texas—Park.—City will vote in November the issuance of \$10,000 of bonds for park. Address The Mayor.

Memphis, Tenn.—Grain Elevator.—John Wade & Sons will erect grain elevator with capacity of between 70,000 and 100,000 bushels, costing about \$30,000. Contract has been awarded to Fred Freidline & Co., architects and builders, Chicago, Ill.

Memphis, Tenn.—Printing.—Foster Printing Co. incorporated with \$50,000 capital stock by D. T. Foster, J. W. Foster, D. E. Watson and H. H. Bonner.

Memphis, Tenn.—Electric Equipment Company.—Electric Equipment Co. incorporated with \$10,000 capital stock by Fred Clayton, W. S. Counsell, J. H. Short, W. B. Morgan and George Harsh.

Memphis, Tenn.—Stockyards.—Memphis Stockyards Co. incorporated with \$50,000 capital stock by S. M. Neely, B. R. Henderson, E. B. LeMaster and others. Tract of 24 acres has been secured.

Memphis, Tenn.—Dyeing Works.—Kraus & Co. incorporated with \$25,000 capital stock to conduct dyeing and cleaning enterprise by Ernest Kahn, Maurice Kraus, M. H. Rosenthal and others.

Miami, Fla.—Transportation.—Dade Transit Co., recently reported incorporated with Kirk Munroe, president, will establish automobile livery and passenger service; plans not perfected. (See "Machinery Wanted" column.)

Mount Vernon on the Potomac, Va.—Telephone System.—Vernon Telephone Co. incorporated with \$5000 capital stock to construct telephone system in Carroll county, Virginia; S. W. Worrell, Woodlawn, Va., president; A. W. Alderman, vice-president, and G. H. Alderman, Ethelfelts, Va., secretary.

New Decatur, Ala.—Publishing.—Z. Z. Sherill will publish the Twin City Herald, a daily newspaper.

New Orleans, La.—Dock Cranes.—Board of Commissioners of New Orleans contemplates equipping local wharves with large cargo cranes and providing for such equipping in building wharves in future. A. C. Bell, offices in Hibernia Bank Building, is board's engineer.

New Orleans, La.—Canal, Coal Barges, etc. Chas. D. Haines of New York city is reported as announcing that he, W. J. Kelley, W. P. Ross, M. J. Sanders, R. A. Warriner and Edjar H. Farrar of New Orleans have pur-

chased an interest in the Lake Borgne canal and locks and will form a company to thoroughly repair the system and establish a barge line for freighting coal from the Alabama mines to New Orleans. It is understood that an engineer will be engaged at once to examine the waterway and make suggestions and estimate on improvements needed. Further, it is reported that Mr. Haines has stated there will be expended \$1,500,000 for the betterments and for barges, tugs and other equipment necessary. Mr. Haines is registered this week at the Hotel Denechaud, New Orleans.

Norfolk, Va. — Hardware. — Armstrong-Brooks Hardware Co. incorporated with capital stock of \$5000; J. B. Armstrong, president; C. H. Armstrong, vice-president, and R. F. Brooks, secretary-treasurer.

Norfolk, Va. — Land Improvement. — Maxwell Realty Corporation incorporated with capital stock of \$25,000; T. D. Savage, president; W. H. Taylor, secretary, and R. G. Camp, treasurer.

Norfolk, Va. — Automobiles, etc. — The Carriage & Auto Co. incorporated with capital stock of \$15,000; W. C. Koller, president, and C. E. O'Neill, secretary-treasurer; to deal in automobiles and other vehicles.

Norfolk, Va. — Oil Wells. — Norfolk-Princess Anne Oil Co. incorporated with \$25,000 capital stock; Abbott Morris, president; G. H. Rick, secretary, and T. M. Johnson, treasurer.

Norfolk, Va. — Telephone System. — Planters' Telephone Co. incorporated with \$5000 capital stock; J. G. DeBaun, president; J. E. Hall, vice-president; V. Engel, secretary, and C. M. Williamson, treasurer.

Oak Grove, Tenn. — Land Improvement. — Oak Grove Land Co. incorporated with \$12,000 capital stock by W. K. Burton, George C. Venable, D. C. Thompson and others to purchase, improve and subdivide property.

Oklahoma City, O. T. — Land Improvement. — Oklahoma Land & Colonization Co. incorporated with \$300,000 capital stock by Charles E. Logan of Oklahoma City; D. Lafe Nubler, Newkirk, O. T., and others.

Oklahoma City, O. T. — Florists. — David S. Beach & Son incorporated with \$100,000 capital stock by E. V. Remington, Oklahoma City; David S. Beach and J. H. Beach, Jr., Bridgeport, Conn.

Pascagoula, Miss. — Building Company. — Pascagoula Building Co. incorporated with \$50,000 capital stock by H. Herring, Henry Jacobs, J. J. Tomalsich and others; will erect three-story brick-and-stone office building.

Reeding, O. T. — Grain. — Reeding Grain Co. incorporated with \$10,000 capital stock by S. J. Evans, S. W. and N. M. Hogan, all of Cashion, O. T.

Russellville, Ark. — Oil and Minerals. — Russellville Gln. Oil & Mineral Co. incorporated with William Brooks, president.

Sedalla, Mo. — Rice Lands. — Arkansas Rice Land Development Co., recently reported incorporated with \$45,000 capital stock, has elected T. T. Vies treasurer and secretary; principal address, Hazen, Ark.; machinery not purchased. (See "Machinery Wanted" column.)

Stone Mountain, Ga. — Immigration Colony. — Reported that Vincenzo Palumbo, New York, N. Y., and Joseph Parantha, Atlanta, Ga., have purchased 500 acres of land at Stone Mountain on which to locate an immigrant colony. It is planned to divide the land into truck farms, establish dairies and creamery, etc.

St. Louis, Mo. — Heating Plant. — Board of Public Improvements, Andrew J. O'Reilly, president, and W. B. Dryden, secretary, will install low-pressure heating system in new quarantine hospital building in St. Louis county. Contract will be awarded October 21. (See "Machinery Wanted" column.)

St. Louis, Mo. — Painting. — Busch & Latta Painting Co. incorporated by John A. Busch, Allen T. Latta, Ada Busch and Eliza Latta. Union, S. C. — Land Reclamation. — A. H. Foster and F. M. Farr are reported to organize stock company to reclaim lands along Fair Forest creek and other streams.

Tate Springs, Tenn. — Resort and Bottling Works. — M. L. Fox, Chicago, Ill., has purchased the Gammon Springs property near Tate Springs; will build resort and establish plant for bottling the water. Mr. Fox will reside in Chattanooga during the winter.

Temple, Texas. — Publishing. — Temple Daily Telegram Co. organized for the purpose of publishing a daily newspaper; contract for machinery reported to have been awarded.

Washington, D. C. — Automobiles. — Flynn Motor Car Co. incorporated with capital stock of \$15,000 by J. J. Flynn, president; H. I. Quinn, vice-president, Century Build-

ing, 412 5th street N. W., and F. M. Smoot, secretary and treasurer.

Wheeling, W. Va. — Plumbing Supplies. — Trimble & Lutz are having plans revised by Glessey & Faris, Schmittbach Building, for erection of factory building; two stories; 120x120 feet; brick. (See "Machinery Wanted" column.)

Yukon, O. T. — Elevator. — Yukon Elevator Co. incorporated with \$10,000 capital stock by J. F. Kroutill of Yukon, H. A. Fisher, Wahoo, Neb., and others.

MISCELLANEOUS MANUFACTURING PLANTS

Atlanta, Ga. — Mop Factory. — W. H. Zachry, 210 Spring street, will establish plant for manufacturing mops. All machinery not purchased. (See "Machinery Wanted" column.)

Avery Island, La. — Canning, etc. — The McIlhenny Company is of Avery Island, La., not Georgia, as erroneously printed last week. It is understood to be completing arrangements for the purchase of the various canning and sauce-manufacturing plants which have been referred to, and a meeting of those interested will be held soon to elect directors. The manufacturing of tabasco sauce and flavoring extracts and the canning of oysters, fish, shrimp and other sea food will be continued. E. A. McIlhenny is named for election as president.

Baltimore, Md. — Enameled-ware Plant. — Baltimore Enamel & Novelty Co., Allen and Clement streets, has awarded contract to Frederick Decker & Son, 1209 East Biddle street, for construction of one-story addition, 64x122 feet, to cost \$6000.

Baltimore, Md. — Metal Plates and Specialties. — Federal Manufacturing Co. has been incorporated with capital stock of \$25,000 to manufacture metal plates and specialties by Henry B. Sonneborn, Louis B. Sonneborn, Philip B. Sonneborn, Philip Praetorius and Heinrich Becker, all at northwest corner Pratt and Paca streets.

Bessemer, Ala. — Fertilizer Factory. — William C. Lowndes is reported as organizing company to establish fertilizer factory.

Boone Mill, Va. — Flour Mill. — Wm. Kinsey & Son will erect roller flour mill.

Brenham, Texas. — Oil Refinery. — Brenham Compress, Oil & Manufacturing Co. has erected two-story brick building 34x55 feet, 35 feet high, to be equipped with machinery, tanks, etc., for refining oil. It is understood that building will soon be enlarged. Soap factory may also be established; J. W. Martin, supervisor.

Brinkley, Ark. — Creamery. — Jesse Sigworth and R. E. Sturges are organizing company to establish creamery and cold-storage plant.

Clifton Forge, Va. — Gas Plant. — Clifton Forge Public Service Corporation incorporated with capital stock of \$100,000 to establish gas plant. W. G. Mathews is president and A. C. Ford secretary-treasurer; C. C. Dunn, engineer and architect; plans not yet made.

Clinton, O. T. — Sellers & Wise, Chicago, Ill., are reported to build creamery at Clinton.

Clinton, O. T. — Cottonseed-oil Mill. — Orient Cotton Gln Co. is reported to build cottonseed-oil mill, investing about \$75,000.

Erick, O. T. — Grist Mill. — Erick Milling Co. incorporated; president, J. G. Mayfield; secretary-treasurer, J. M. Willman; manager, A. Robbeck; will erect 40x50-foot mill at cost of \$2000 for frame building; cost of machinery, \$1100; daily capacity, 125 barrels flour and 75 barrels meal.

Clintwood, Va. — Wrench Manufacturing. — Rasnick Wrench Corporation, organized with \$200,000 capital stock, will engage in the manufacture of patented wrench; president, J. K. Damron; secretary, R. E. Chase; treasurer, W. W. Presley; vice-president and general manager, W. H. Rouse. (See "Machinery Wanted" column.)

Columbus, Ga. — Syrup Mill. — Penick & Ford, Ltd., New Orleans, La., have purchased plant of Cargill, Wight & Co., and will engage in the manufacture of syrup; capacity, four cars daily; engineer, J. Ralston Cargill. (Recently mentioned.)

Corsicana, Texas. — Oil Refinery. — Navarro Refinery Co. incorporated with \$200,000 capital stock by James Garety, Charles H. Allen, W. J. McKie, E. R. Brown and others.

Dallas, Texas. — Oil Mill. — W. H. Stoppie, 153-155 Camp street, may be addressed for information relative to contemplated establishment of oil mill for rendering oil from Texas-grown Spanish peanuts. (See "Machinery Wanted" column.)

Excelsior Springs, Mo. — Bottling Works. — Excelsior Springs Park & Beverage Co. incorporated with \$50,000 capital stock by H. R. Ennis, F. Thomas and H. C. Pfeiffer.

Fairmont, W. Va. — Creamery. — Fairmont Dairy Co. incorporated with capital stock of \$20,000 by M. M. Neeley, H. S. Lively, H. P. Robinson and others to operate creamery, etc.

Forest Depot, Va. — Cannery. — Wilkes Jopling of Goode, Va., is reported as to establish a cannery at Forest Depot to be operated as the Goode Canning Co.

Fries, Va. — Planter. — W. M. Crump has invented implement for planting cotton, peanuts, beans, etc., and will arrange for its manufacture, probably by contract with manufacturers. (See "Machinery Wanted" column.)

Hallettsville, Texas. — Creamery. — L. D. Lacey, Rock Island, Texas, has awarded contract for erection of creamery at Hallettsville. (Recently mentioned.)

Hamburg, Ark. — Manufacturing. — Hamburg Manufacturing Co. incorporated with \$50,000 capital stock. W. C. Dunlap is president. E. E. Dunlap vice-president and Ed Throgmorton secretary-treasurer.

Hannerville, N. C. — Flour Mill. — F. A. Varnes will install roller flour mill.

Heber, Ark. — Brick Plant. — Max Frauenthal contemplates installation of brick plant. (See "Machinery Wanted" column.)

Houston, Texas. — Cottonseed-oil Mills. — Louis C. Ehlo, Chicago, Ill., has purchased the six mills of the Consumers' Cotton Oil Co., located at Houston, Waco and Greenville, Texas, and Little Rock, Forrest City and Pine Bluff, Ark., each having a daily capacity of 120 tons; John Bowles, Houston, Texas, manager of entire circuit.

Kansas City, Mo. — Soap Factory. — Kansas City Soap Co. is considering erection of factory building; four stories; brick; 60x60 feet; H. D. Fetters, manager.

Kansas City, Mo. — Distillery. — Rich Grain Distilling Co. incorporated with \$5000 capital stock by Raphael Elsen, Alphonso Flunkelstine and Harry Borlinger.

Kansas City, Mo. — Cracker and Candy Factory. — Loose-Wiles Cracker & Candy Co. has had plans prepared by Sheppard & Farfar for erection of addition to plant; 150x128 feet; six stories with basement and sub-basement; cost about \$150,000.

Lexington, Tenn. — Cannery. — Rev. George Simmons, Huntingdon, Tenn., is organizing stock company to establish cannery in Lexington.

Lexington, Ky. — Tobacco Factory. — Fayette County Equity Society, J. D. Clark, secretary, proposes to incorporate company to establish co-operative tobacco factory, investing about \$250,000.

Louisville, Ky. — Spring-bed Factory. — McElroy-Shannon Spring Bed Manufacturing Co. will rebuild factory recently reported burned; machinery will be restored.

Macon, Ga. — Fertilizer Factory. — Macon Fertilizer Works incorporated with \$10,000 capital stock and privilege of increasing to \$100,000 by Baxter Jones and Bruce C. Jones.

Mangum, O. T. — Cottonseed-oil Mill. — Farmers' Cotton Oil Co., recently incorporated, is adding one more press to plant, which has been in operation for one year; W. M. Harris, president; new charter is an amendment.

Moscow, Ky. — Cannery. — Ira W. Little and Polk Beadles are reported as promoting establishment of cannery factory.

Nashville, Tenn. — Stationery Manufacturing and Printing. — Bayless-Pullen Company incorporated with \$50,000 capital stock by L. J. Trousdale, John E. Pullen, E. C. McMillen and others to manufacture stationery and conduct a general printing enterprise.

Natchez, Miss. — Cannery. — W. Cal Brown contemplates establishing cannery factory.

New Martinsville, W. Va. — Glass Bottle Works. — Reported that the Magnolia Window Glass Co.'s plant will be converted into glass bottle works.

New Orleans, La. — Brewery. — People's Brewing Co. incorporated with \$150,000 capital stock to establish brewery. George Muller is president, G. B. Hagstette vice-president, J. W. F. Meyer treasurer and Joseph Barague secretary.

Oklahoma City, O. T. — Roofing Plant. — J. I. Gray Roofing & Manufacturing Co. incorporated with \$10,000 capital stock by J. I. V. and Lillie V. Gray.

Oklahoma City, O. T. — Coal-tar Plant. — Recent report that Barrett Manufacturing Co. of Philadelphia will establish coal-tar plant is incorrect.

Parkersburg, W. Va. — Vitriolite Tile and Plates. — Meyercord-Carter Company incorporated with \$125,000 capital stock to establish plant (for manufacturing vitriolite tile and plates), contract for which has been awarded to J. S. Higgs at \$27,250. About \$30,000 will be expended for machinery; R.

H. Adair, architect; W. T. Carter, Beaver, Pa., president. (Details of plant recently mentioned.)

Roanoke, Va. — Lime, Brick, Concrete, etc. — Fellers Stone Co. incorporated; will manufacture lime, brick, concrete, crushed stone, etc., in connection with operation of stone quarry; E. B. Fishburn, temporary secretary-treasurer.

Roanoke Rapids, N. C. — Paper Plant. — Roanoke Fiber Board Co. incorporated with \$125,000 capital stock to manufacture pulp, boards and specialties by Howard A. Edwards of Roanoke Rapids; Joseph H. Wallace, Temple Court Building, New York, N. Y., and Lewis F. Houtt, Chicago, Ill.; officers not elected; architect and engineer not chosen; machinery not purchased; no new buildings contemplated. (See "Machinery Wanted" column.)

Russellville, Ala. — Russellville Ice & Coca Cola Bottling Co. incorporated with capital stock of \$15,000 by Crawford Johnson and others to operate bottling works and ice plant. (See item under "Ice and Cold-Storage Plants.")

Seguin, Texas. — Creamery. — Reported that A. N. McKinney, Richmond, Texas, will promote establishment of creamery.

South Pittsburg, Tenn. — Concrete-block Plant. — Huffaker, Prime & Wilson will establish concrete-block manufacturing plant; W. H. Wilson, manager; A. E. Prime, engineer in charge; frame building, 50x100 feet, will be erected; cost of building \$1500; cost of machinery \$2500; machinery purchased. (W. H. Wilson was recently noted to organize company.)

Suffolk, Va. — Peanut Factory. — Reported that Milton T. Elliott & Co., New York, N. Y., will establish peanut factory in Suffolk.

Stone Mountain, Ga. — Dairies and Cheese Factory. — Reported that Vincenza Palumba, New York, N. Y., and Joseph Parantha, Atlanta, Ga., will establish dairies and creamery at Stone Mountain. (See item under "Miscellaneous Enterprises.")

St. Louis, Mo. — Hat Factory. — Miller-Rottmann Hat Co. incorporated with \$5000 capital stock by John E. Miller, Alfred F. Rottmann, Henry Miller and others.

Trenton, Mo. — Bonnet Factory. — Lathrop Sunbonnet Co. incorporated with \$5000 capital stock by Richard L. Cochran, James O. Baker, Samuel Sheldon and others.

Vernon, Texas. — Cotton-oil Mill. — Vernon Cotton Oil Co., recently reported incorporated, will manufacture cottonseed products, continuing in operation the plant of which W. T. Waggoner has been proprietor heretofore. Mr. Waggoner is president of company.

Washington, D. C. — Trunk and Leather Goods Factory. — James S. Topham, manufacturer of trunks, satchels and fine leather goods, 1219 F street N. W., has purchased lot containing 10,000 square feet at corner Eckington place and Q street and will erect factory on site, to cost about \$50,000, and which will provide for an increased capacity of about 50 per cent.

Waycross, Ga. — Paper-pulp Mill. — Burdett Loomis, Hartford, Conn., contemplates establishing plant to prepare wood pulp for use in the manufacture of paper. (Mr. Loomis and associates were recently mentioned to establish gas works, plant for distillation of wood for rosin and turpentine, manufacture and creosote paving blocks, etc.)

Wellborn, Fla. — Corn and Rice Mill. — Union Manufacturing Co., recently reported incorporated, will establish mill for grinding corn and rice; will also install cotton gin; president, W. L. Rogers; treasurer, H. W. Moseley; secretary and manager, J. F. Carver; building and machinery purchased.

Winston-Salem, N. C. — Harness Factory. — Smoak & McCreary, offices in the Nissen Building, have purchased the Hewlett-Grantham Harness Co., Wilson, N. C., and will remove the plant to Winston-Salem. (Company was recently mentioned as installing additional machinery and to operate vehicle repair shop.)

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Cleburne, Texas. — Gulf, Colorado & Santa Fe Railway, C. F. W. Felt, chief engineer, Galveston, Texas, is reported to extend blacksmith and boiler shops 200 feet and construct additional trackage at Cleburne.

Eldorado, Ark. — Chicago, Rock Island & Pacific Railway Co. will expend \$250,000 for terminal buildings and yard; will also erect 10-stall roundhouse. No contracts have been awarded. H. Q. Clark, district engineer, Little Rock, Ark., is in charge. J. B. Berry, offices in Chicago, Ill., is chief engineer.

(Included in improvements mentioned recently.)

Little Rock, Ark.—Chicago, Rock Island & Pacific Railway Co. is building four storage tracks, H. G. Clark, district engineer, being in charge. Grading contract awarded to H. Dalhoff. J. B. Berry, Chicago, Ill., is company's chief engineer. (Included in improvements recently mentioned.)

Little Rock, Ark.—Chicago, Rock Island & Pacific Railway is understood to be completing arrangements for the improvement of the Reichardt tract, consisting of 519 acres. Contracts are said to be awarded for the construction of trackage and subdivision of the property, which it is planned to divide into 359 lots, to be used mainly for factory purposes. Company also proposes to extend 25th street, build terminal or belt line and has reserved 100 acres south of the belt line for its new shops. It is estimated that a total of \$1,000,000 will be expended; J. B. Berry, chief engineer, Chicago, Ill. (Extensive improvements, including construction of shops, roundhouse and terminals, have been referred to previously.)

Paducah, Ky.—Illinois Central Railroad will erect steel coal chute costing about \$35,000 to be operated by a line engine. W. C. Waggoner, superintendent bridges and buildings, Princeton, Ky., will probably superintend construction.

Sayre, O. T.—Chicago, Rock Island & Pacific Railway is reported to construct repair shop and build 18-stall roundhouse at Sayre. J. B. Berry, Chicago, Ill., is chief engineer.

Somerville, Texas.—Gulf, Colorado & Santa Fe Railway, C. F. W. Felt, chief engineer, Galveston, Texas, is reported to enlarge terminals at Somerville.

Waurika, O. T.—St. Louis & San Francisco Railroad, J. F. Hinckley, chief engineer, St. Louis, Mo., is reported to build roundhouse and probably machine shops at Waurika.

Winnfield, Ark.—Chicago, Rock Island & Pacific Railway Co. will expend \$150,000 for terminal buildings and yard. Contract for grading awarded to H. Dalhoff of Little Rock, Ark. Contracts not awarded for buildings. H. G. Clark, district engineer, Little Rock, Ark., is in charge. J. B. Berry, Chicago, Ill., is company's chief engineer. (Included in improvements mentioned recently.)

ROAD AND STREET IMPROVEMENTS

Athens, Ala.—Limestone County Commissioners have rejected all bids opened October 12 for first five miles of road construction; C. D. Glaze, president Road Commission. (Recently mentioned.)

Baltimore, Md.—Board of Awards, City Hall, will receive bids until October 30 to pave with vitrified brick, bitulithic, asphalt blocks or sheet asphalt 25th street between St. Paul and Calvert streets. Specifications can be obtained from Commissioners for Opening Streets.

Bastrop, La.—City is contemplating laying of four-foot cement sidewalk on 36 city blocks; J. H. Allen, Mayor. (See "Machinery Wanted" column.)

Beaumont, Texas.—James F. Weed has been engaged to supervise the improvement of roads in Jefferson county under the expenditure of the \$300,000 bond issue. George A. White, assistant to Mr. Weed, is now making a preliminary survey of roads to be improved. It is estimated that 100 miles of shell roads will be constructed. (Referred to in August.)

Brunswick, Ga.—City contemplates calling an election to vote on issuance of \$75,000 of bonds for street paving. Address The Mayor.

Bryan, Texas.—City Council is preparing to reconstruct and repair crushed road and clay bed of Main street. Address The Mayor.

Chattanooga, Tenn.—City will construct chert roadways on Cherry and 1st streets. Contract will be awarded October 29; T. J. Gillespie, City Treasurer; H. F. Van Dusen, chairman Board of Public Works. (See "Machinery Wanted" column.)

Concord, N. C.—Cabarrus county will grade and macadamize about 10 miles of public road from Concord to Kannapolis, N. C., and about one mile on the Concord and Charlotte road. Bids will be opened October 24. Quint E. Smith, civil engineer; John A. Cline, chairman County Commissioners. (See "Machinery Wanted" column.)

Dallas, Texas.—City Commission has adopted a resolution calling for bids on vitrified brick or blocks for paving Main street; William Doran, Commissioner of Streets and Public Property. (Recently mentioned.)

Denton, Md.—Caroline county will improve public highways between Denton and Three Bridges, known as Denton-Three Bridges road. Bids will be opened November 12; I.

L. Dukes, clerk. (See "Machinery Wanted" column.)

Dublin, Ga.—City will vote December 9 on issuance of \$30,000 of bonds for street paving. Address The Mayor. (Recently mentioned.)

Glasgow, Ky.—City will vote on issuance of \$30,000 of bonds for street improvements, purchase of rock crusher, betterments to city fire department and payment of present indebtedness. Address The Mayor.

Greenwood, S. C.—Frank Barker has contract to lay 3000 yards of sidewalk paving. (Wilson, Sompayrac & Urquhardt, Columbia, S. C., were mentioned in August as being engineers in charge of laying vitrified brick pavement for which \$40,000 would be expended.)

Groesbeck, Texas.—City Council has awarded contract for construction of 4000 feet of brick sidewalks. Address The Mayor.

Gulfport, Miss.—Harrison County Board of Supervisors appropriated about \$12,500 for road improvement.

Lawton, O. T.—City Engineer Kennard will prepare plans and specifications for street paving, upon completion of which bids will be invited, specifying prices on asphalt, bitulithic, brick and macadam. It is estimated that about \$200,000 will be expended. (Recently mentioned.)

Trenton, Tenn.—Gibson county contemplates calling an election to vote on issuance of \$500,000 of bonds for road improvements. Address County Commissioners.

Tulsa, I. T.—City will pave about 40 blocks with asphalt on concrete base. T. C. Hughes, City Engineer; O. P. Jones, City Recorder. (See "Machinery Wanted" column.)

SEWER CONSTRUCTION

Andrews, N. C.—Town authorities, now constructing sewerage system, propose to install a number of flushing tanks and are inviting proposals for same. J. Q. Barker, alderman, can be addressed. (See "Machinery Wanted" column.)

Blackstone, Va.—City is receiving bids for installation of sewerage system; engineer in charge, John W. Hays, Petersburg, Va.; H. H. Seay, chairman Water & Sewerage Commission. (See "Machinery Wanted" column.)

Chattanooga, Tenn.—T. J. Shea is lowest bidder for construction of Chestnut-street sewer. (Recently mentioned.)

Chester, W. Va.—Chester Improvement Co. incorporated with capital stock of \$10,000 to construct sewer system by O. O. Allison, Jos. N. Finley, George E. Lewis, Thomas G. Stewart and others.

Forsyth, Ga.—City has voted \$15,000 of bonds for construction of sewerage system. Address The Mayor.

Maxton, N. C.—Town will vote December 9 on issuance of about \$40,000 of bonds for construction of sewer system and water-works. Address Town Commissioners.

Pensacola, Fla.—James Knox Taylor, supervising architect, Washington, D. C., is to open bids on November 11 for plumbing and sewerage construction at Santa Rosa Quarantine Station. (See "Machinery Wanted" column.)

Smithfield, N. C.—N. M. Lawrence, Jr., N. B. Grantham and F. H. Brooks, committee appointed recently, are inviting plans, specifications and estimates on construction of sewer system. (See item under "Water-works" in "Machinery Wanted" column.)

TEXTILE MILLS

Albany, Ga.—Albany Business League will organize company with capital stock of \$250,000 to build mill of 10,000 spindles, to be operated by electricity, on the production of cotton yarns; \$175,000 has been subscribed.

Bristol, Tenn.—Board of Trade has completed arrangements for organization of company, lately mentioned, for knitting hosiery. Philadelphia parties will furnish capital and manage plant.

Charlotte, N. C.—Sumner B. Sargeant, recently mentioned as proposing organization of mill company, will capitalize the enterprise at \$100,000 and probably install 5000 spindles for manufacturing cotton yarns.

Chickamauga, Ga.—Crystal Springs Bleachery Co. has awarded contract to Adams & Schneider of Chattanooga, Tenn., for construction of 80x470-foot main building, to cost about \$50,000; details of bleachery plant reported heretofore.

Cleveland, O. T.—Cleveland Hosiery Mills incorporated with capital stock of \$75,000 by Charles E. Brown and Thomas Adams of Cleveland and A. J. McMahon of Oklahoma City, O. T.

Cross Hill, S. C.—M. S. Bailey & Son of Clinton, S. C. have purchased and will operate the Cross Hill Knitting Mills.

Florence, Ala.—Ashcraft Cotton Mills will install equipment for manufacturing and printing bags; folders, cutters and printing machinery not yet purchased. (See "Machinery Wanted" column.)

Gaffney, S. C.—Gaffney Manufacturing Co. is reported as to add several thousand spindles; present equipment, 61,648 spindles and 1566 looms.

Huntsville, Ala.—Huntsville Bagging Co. will be incorporated with capital stock of \$150,000 to establish jute-bagging mill; building has been secured.

Junction City (postoffice at Paschal), Ga.—C. W. Moore of Junction City and C. F. Reynolds of Broxton, Ga., propose to organize company with capital stock of \$200,000 to build mill for manufacturing brown cloth. North Carolina capitalists will be interested. Address Mr. Moore.

Kansas City, Mo.—Kansas City Cotton Mills Co. will install 5000 spindles additional to present equipment, as reported recently. Contract has been awarded for the new machinery.

Kinston, N. C.—Caswell Cotton Mills incorporated with capital stock of \$200,000 to build cotton mill by J. E. Hood, J. W. Black, J. W. Grainger, F. C. Duncan and others. (Mr. Hood and others lately mentioned as proposing to form mill company.)

Marble Falls, Texas.—C. H. Alexander of Dallas, Texas, who recently purchased the Marble Falls Cotton Mills and water-power plant, contemplates building 10-foot dam on top of present dam in order to furnish additional power for transmission by electricity to the cotton mill and other manufacturing plants in operation or to be established.

Maxton, N. C.—Atlantic Cotton Mills is title of company recently mentioned as incorporated by G. B. Patterson and associates; company will endeavor to organize soon and determine all details; will install from 5000 to 10,000 spindles.

Mexia, Texas.—W. L. Murphy, vice-president of First National Bank, is corresponding with Eastern capitalists who contemplate establishing cotton mill in Mexia.

Salisbury, N. C.—Grace Cotton Mills, lately reported incorporated with \$50,000 capital stock, will acquire and continue plant for manufacturing mercerized damask, established by Frank L. Robbins. Equipment is 18 looms, and is reported to be duplicated. Mr. Robbins is president and treasurer.

Sherman, Texas.—Sherman Oil Mills Co. is reported as negotiating with Boston (Mass.) capitalists relative to installation of cotton mill; proposed to organize company with capital stock of \$500,000.

Statesville, N. C.—A. R. Sherrill contemplates establishing plant for manufacturing and reworking old jute bagging and manufacturing burlaps. Machinery not purchased yet and information is wanted. (See "Machinery Wanted" column.)

St. Pauls, N. C.—St. Pauls Cotton Mill Co. has awarded contract to Mason Machine Works of Taunton, Mass., through this company's Charlotte (N. C.) representative for equipment of machinery—5000 spindles and complementary apparatus for manufacturing cotton yarns. R. C. Bibberstein of Charlotte, N. C., is engineer in charge. Other details of organization of company, etc., reported in August and previously. L. Shaw is president.

Thomson, Ga.—John E. Smith Cotton Manufacturing Co. is reported as to double its present mill of 12,000 ring spindles and 350 looms, operated by steam power. R. C. Bibberstein of Charlotte, N. C., is said to have been engaged as engineer in charge of enlargements, and contracts for machinery are said to have been awarded.

Wilson, N. C.—B. B. Boykin and others propose the organization of \$250,000 stock company to build cotton mill.

Woodruff, S. C.—W. S. Gray Cotton Mills has awarded contract to Ebaugh & Ebaugh of Greenville, S. C., for construction of mill building, three stories high, 75x325 feet; this building to be equipped with 10,000 spindles for manufacturing Nos. 20 to 30 cotton yarns. Other details of Gray company were reported last month. W. H. Gray is president.

Zebulon, N. C.—Zebulon Hosiery Mills reported last week is of Zebulon, N. C., not of Georgia, as erroneously printed.

WATER-WORKS

Atlanta, Ga.—City will advertise for a 20,000,000-gallon and a 25,000,000-gallon centrifugal pump, as well as other kinds of pumps; bond \$10,000; check \$5000; Frank Rice, president Water Board. (Decision changed since recent mention.)

Blackstone, Va.—City will build reservoir with capacity of 250,000 gallons of water and

lay one and one-half miles of water piping. Proposals are invited; H. H. Seay, chairman of committee; engineer in charge, John W. Hays, Petersburg, Va. (See "Machinery Wanted" column.)

Bluefield, W. Va.—Midway Water Co. incorporated with \$100,000 capital stock by W. A. Bodel and N. W. E. Elliott, both of Bluefield; W. D. Roberts, R. A. Wells and R. B. Williamson, all of Graham, Va., to maintain pipe lines for distributing water; will construct about 1500 feet four-inch mains; pipe has been purchased; officers not yet elected.

Breaux Bridge, La.—City will construct water-works, expending about \$30,000. Address Water-Works Board.

Claremont, I. T.—City's proposed election to vote on issuing \$40,000 of bonds for water-works extension will be held on October 22 and an affirmative vote is expected. The improvements will necessitate the purchase of eight-inch cast-iron pipe, water filter and electrical supplies for a transmission line from city limits to Verdigris river, five miles distant; W. P. Johnston, clerk. (See "Machinery Wanted" column.)

Crockett, Texas.—City has voted \$25,000 of bonds for construction of water-works. Address The Mayor. (Recently mentioned.)

Dallas, Texas.—City's proposed water-works improvement plans are not matured; will include installation of high-service pump with 10,000,000 gallons capacity; J. M. Barrett is chief engineer of pumping station; D. F. Sullivan, commissioner; R. B. Nelms, secretary. (See "Machinery Wanted" column.)

Dublin, Ga.—City will vote December 9 on issuance of \$30,000 of bonds for enlarging water-works and installing fire-alarm system and \$5000 for public park. Address The Mayor. (Recently mentioned.)

Elgin, Texas.—Mr. Graham, Smithville, Texas, has submitted proposition to establish water, light and ice plant, investing about \$60,000. It is proposed to obtain water supply from Carr Springs.

Johnson City, Tenn.—Watauga Water Co. and the Johnson City Water Co. have been consolidated with Mrs. Alice Clay, New London, Conn., president, and W. E. Burbage, probably of Johnson City, superintendent. It is understood that a system of impounding reservoirs will probably be constructed, as recommended by engineers who have been employed.

Lebanon, Tenn.—City is considering an election for voting an issuance of \$10,000 of bonds for building reservoir on Fox Hill and conducting water to town. Base of reservoir will be of solid rock and eight and one-half feet higher than present standpipe. As recently mentioned, water will be obtained from artesian wells now being sunk on Fox Hill, and a plant, which will furnish 250,000 gallons of water daily, will be installed; H. K. Edgerton, chairman of water committee.

Maugum, O. T.—City has voted \$10,000 of bonds for extension of water-works. Address The Mayor. (Previously mentioned.)

Maxton, N. C.—Town will vote December 9 on issuance of about \$40,000 of bonds for construction of water-works and sewerage system. Address Town Commissioners.

McKinney, Texas.—City will vote in November the issuance of \$8000 of bonds for extension of water-works. Address The Mayor.

Memphis, Tenn.—Memphis Artesian Water Co. will erect circular reinforced-concrete reservoir with capacity of 50,000 gallons and costing \$9000; Charles R. Miller & Co., contractors.

Natchitoches, La.—Water and Electric Committee has been authorized to lay 2500 feet of four-inch mains and install five additional fire hydrants.

Pawnee, O. T.—City has voted and disposed of \$20,000 of bonds for water-works construction. Address The Mayor. (Referred to in August.)

Pioneer (P. O. Floyd), La.—Pioneer Cooperative is installing water-works and electric-light plant.

Sapulpa, I. T.—City will vote on issuance of \$50,000 of bonds for water-works, etc. Address The Mayor.

Sarita, Texas.—Sarita Water-Works Co. will establish water-works system at cost of \$15,000; capacity, 300,000 gallons; engineer, John T. Love; address John G. Kennedy.

Smithfield, N. C.—N. M. Lawrence, Jr., N. B. Grantham and F. H. Brooks, the committee recently noted as appointed to investigate as to the construction of water-works, electric-light plant and sewer system, announces that if the plants are definitely decided on an election for bonds will be ordered. They are inviting plans, specifications and estimates on the plants. (See "Machinery Wanted" column.)

Teague, Texas.—City contemplates calling an election to vote on issuance of \$40,000 of bonds for construction of water-works. Address The Mayor.

WOODWORKING PLANTS

Baltimore, Md.—Scoll Milling Co. incorporated with capital stock of \$350,000 to manufacture furniture and household articles by Meyer Scoll, Jacob Scoll, both at 1000-1004 Hanover street, and others.

Central City, W. Va.—J. F. Haury Bending Co. incorporated with \$25,000 capital stock by J. F. Haury, Albert Bihn, Stiles Coleburn, all of Erhart, Ohio; Joseph Graves Strader, Cleveland, Ohio, and others, to manufacture bent felloes, hubs and spokes, etc.

Corpus Christi, Texas.—Southwestern Planing Mill Co. will erect three buildings, one 24x100 feet for planing mill, one 24x100 feet for cistern factory and one 24x60 feet for crate factory.

Des Arc, Ark.—Buena Vista Veneer Co. incorporated with \$10,000 capital stock to establish veneering plant. Herman Romunder, Mishawaka, Ind., is president, H. A. Van Duzen general manager and Edwin Williams engineer and architect. (Recently mentioned.)

Earl, Ark.—Edward Hamilton, Wynne, Ark., will establish stove factory at Earl.

East Lake, Tenn.—Chattanooga Wheelbarrow & Truck Co., recently reported incorporated with \$50,000 capital stock by Z. W. Wheeland and others, all of Chattanooga, Tenn., will take over and improve the plant of the Chattanooga Wheelbarrow & Manufacturing Co., located at East Lake, continuing to manufacture wheelbarrows, trucks, etc.

Ellisville, Miss.—Ellisville Manufacturing Co. will be formed by George B. Pack, Geo. Gaugh and others to manufacture doors, windows and building furnishings.

Fort Smith, Ark.—Fort Smith Refrigerator Works, manufacturers of home refrigerators, will be reorganized and capital stock increased from \$40,000 to \$100,000 to provide for enlargements. S. H. Abbott is president and E. C. Cluff, Kendallville, Ind., vice-president and general manager.

Fort Smith, Ark.—American Veneer Co. organized with \$25,000 capital stock; James Ingalls, president; Charles B. Hughes, vice-president, and Joseph Strand, secretary-treasurer.

Fort Worth, Texas.—Board of Trade is corresponding with St. Louis (Mo.) capitalists relative to establishment of casket factory representing an investment of \$150,000. Site of five acres in Factory Place addition has been secured.

Hattiesburg, Miss.—Lewis Lumber & Manufacturing Co. incorporated with \$35,000 capital stock by R. R. Akers and E. L. Russell to manufacture crossarms and other supplies for telegraph and telephone companies, wood-ware novelties and ice.

Huntington, W. Va.—Dickinson Furniture Co. incorporated with \$10,000 capital stock by P. E. Dickinson, S. E. Reynolds, L. H. Cammack and others.

Laurinburg, N. C.—Colonial Screen Venetian Blind & Door Co. incorporated with \$50,000 capital stock to manufacture window and door screens, venetian blinds, doors, sashes, etc., by Walter H. Neal, Thomas J. Gill, A. A. McEachern and others.

Maryville, Tenn.—Company has been incorporated to establish mantle factory, with A. M. Dolgue of Michigan, president; James Richey, vice-president, and Horace Brakeville, secretary, both of Maryville.

Meridian, Miss.—A. D. McRaven, Ellisville, Miss., will establish plant at Meridian for manufacturing wagons, drays and lumber carts, investing about \$10,000.

Nashville, Tenn.—Rock City Spoke Co. will enlarge its plant. Capital stock was recently mentioned as having been increased from \$21,000 to \$50,000.

Nashville, Tenn.—Hill Trunk Co. will erect new plant; two stories; brick and corrugated iron; cost \$10,000; will also install machinery for manufacturing suit cases and traveling bags; Walter McComb, Sr., J. M. Journey and others, firm members.

Quitman, Ark.—E. E. Meneses contemplates building stove mill. Machinery has not been purchased.

Ridgedale, Tenn.—Union Lumber Co. (formerly Chattanooga Coopers Co.) will erect additional building to be equipped as sash and door plant at a cost of \$5000; Edward Ferger, vice-president.

Ridgedale, Tenn.—Union Lumber Co. (formerly Chattanooga Coopers Co.) is erecting additional building to be equipped as

sash and door plant at a cost of \$5000; machinery purchased; Edward Ferger, vice-president; principal address, Chattanooga, Tenn.

Rogers, Ark.—Rogers Canning Co. will establish sawmill and box factory.

St. Louis, Mo.—D. Rosentreter Woodenware Co. incorporated with \$10,000 capital stock by John H. Dunn, Edward I. Eastburn and David Rosentreter to manufacture and deal in woodenware.

St. Louis, Mo.—Prufrock-Litton Furniture Co. incorporated with \$50,000 capital stock by Harry Prufrock, R. Litton Prufrock and J. R. Wilder to manufacture furniture.

St. Louis, Mo.—Hattenhorst Picture Frame Co. incorporated with \$5000 capital stock to manufacture picture frames by Augusta Hattenhorst, Edward R. Bauer and William H. Linstruth.

Valdosta, Ga.—C. A. Lucas contemplates establishing handle, spoke, trunk or other woodworking plant. No details determined as yet and correspondence is invited. (See "Machinery Wanted" column.)

Voth, Texas.—Keith Lumber Co., Beaumont, Texas, has about completed erection of addition to main sawmill plant at Voth, in which machinery has been installed for manufacturing headings, all kinds of staves and lathes, etc.; daily capacity, 18,000 staves and material for about 1000 barrels. Company will not at present manufacture the barrels, but will only make the material. As an adjunct to planing mill, building has been erected and equipped with machinery for producing boxes, crates, etc. Between \$12,000 and \$15,000 has been expended.

Wadesboro, N. C.—Wadesboro Furniture Co. incorporated with \$50,000 capital stock by W. T. Rose, R. T. Bennett, Jr., W. Henry Liles and others.

Walters, Miss.—Anderson-Tully Company, Memphis, Tenn., S. B. Anderson, president, will rebuild box factory recently reported burned; sheet-iron building; 100x150 feet; architect, D. Campbell, Memphis, Tenn.

BURNED

Adasburg (P. O. Washington), Ga.—W. P. Harper & Co.'s cotton gin; loss about \$7000. Ambia (P. O. Paris), Texas.—Charles Park & Son's cotton gin; loss \$6000.

Aonia, Ga.—W. P. Harper & Co.'s grist mill and ginning plant.

Artesia (P. O. Hallaboro), N. C.—H. C. Buck, Jr., Lumber Co.'s drykiln, planing mills and lumber yards.

Bainbridge, Ga.—Lanark Inn, owned by the Georgia, Florida & Alabama Railway, T. G. Barney of Bainbridge, chief engineer; loss \$15,000.

Bellevue (P. O. Uniontown), Ala.—Dan Wrencher's cotton gin.

Belzona, Miss.—Belzona Oil Co.'s mill; loss \$40,000.

Columbus, N. C.—Cloud & West Lumber Co.'s drykiln.

Cumberland, Md.—Potomac Planing Co.'s plant; loss \$7500.

Eaton, Miss.—Joe Haney's sawmill; loss \$6000.

Elkins, W. Va.—W. H. Cobb's mercantile building; loss \$20,000.

Garrison, Texas.—W. D. Finston's bottling works; loss \$1500.

Georgetown, Texas.—Kyle & Jackson's cotton gin; loss \$8000.

Hillsboro, Texas.—Hill County Cotton Oil Co.'s hullhouse; total loss about \$7500.

Hilton, Va.—W. R. Bevins' sawmill.

Hot Springs, Ark.—Arkansas Lumber Co.'s drykiln; loss \$20,000.

Key West, Fla.—M. Morales' cigar factory.

Kinston, N. C.—Kinston Lumber Co.'s drykilns; loss about \$10,000.

Lake Waccamaw, N. C.—Buck Lumber Co.'s drykilns and planing mills.

Latimer, S. C.—Claude McAllister's cotton gin.

Logan, W. Va.—Oakland Hotel, owned by Ebon C. Bonis; loss \$5000.

Lucedale, Miss.—Lucedale Commercial Co.'s warehouse; loss \$3000.

Mineral Wells, Texas.—Delaware Hotel, owned by Little & Hitchell; loss \$41,000.

Mobile, Ala.—Jacob Pollock's warehouse; loss \$4500.

Norfolk, Va.—Tidewater Steam Laundry.

Paragould, Ark.—John Freeman's planing mill; loss \$3000.

Paragould, Ark.—Coffman Planing Mill Co.'s planing mill; loss \$3000.

Pine Bluff, Ark.—J. W. Saunders' plant, including sawmill, factory and lumber yard; loss \$75,000.

Pontotoc, Miss.—C. W. Stegall's round-lap cotton compress and gin; loss \$20,000.

Reynolds, Ga.—J. W. Harp's ginhouse.

Savannah, Ga.—H. H. Peoples & Sons' store building; loss \$20,000.

Stallo (P. O. Maurine), Miss.—Walton Hotel.

Talladega, Ala.—Talladega Planing Mill Co.'s mill, drying-house, etc.; loss \$26,000.

Trezevant, Tenn.—A. H. Jones' lumber mill.

Tyler, Texas.—T. L. Kidd's cotton gin; loss \$3500.

BUILDING NOTES

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

APARTMENT-HOUSES

Louisville, Ky.—L. Keller & Sons will erect apartment-house; three stories; brick; cost \$10,000.

Newport, Ky.—Ben Bowman has contract to erect apartment-house costing \$10,000 for Philip Bitzer after plans by C. C. & E. A. Weber, Cincinnati, Ohio.

Norfolk, Va.—East & Hobbs, contractors, will erect apartment-house; 100x61 feet; 16 apartments; pressed brick; stone trimmings; slow-burning construction; steam heat; electric lighting; freight elevators; cost \$65,000.

St. Louis, Mo.—H. L. Schaeffer will erect store and apartment building; two stories; 95x70 feet; cost \$25,000; George H. Kennerly, Benoist Building, architect.

St. Louis, Mo.—William P. McMahon is preparing plans and specifications for store and apartment-house; 50x55 feet; brick and stone; cost \$10,000.

St. Louis, Mo.—M. R. Mallory will erect apartment building; brick and stone; cost \$12,000; William P. McMahon, architect.

Washington, D. C.—Wm. S. Spencer, Bond Building, 14th street and New York avenue N. W., was lowest bidder for alterations to be made to connect Highlands and Westmoreland apartment-houses. Westmoreland will be used as hotel in future; Arthur B. Heaton, architect, 1319 F street N. W.

Washington, D. C.—Dr. James Kerr, 1711 H street N. W., has commissioned T. Kent Roberts, architect, to prepare plans and specifications for reconstruction of his dwelling at 1711 H street N. W. into apartment-house.

CHURCHES

Albemarle, N. C.—Methodist Congregation has not engaged architect to prepare plans for church edifice recently mentioned. As proposed, building will be of brick, in Gothic style; hot-air heat; electric lighting; pipe organ, bell, etc.; cost \$20,000; bids to be opened in about two months; H. A. McCullough, pastor.

Alexandria, La.—Jewish congregation will erect stone temple at a cost of \$30,000. Address The Rabbi, Jewish Congregation.

Atlanta, Ga.—Braughton Institutional Church is having plans prepared by R. H. Hunt, Chattanooga, Tenn., for erection of edifice to cost about \$300,000.

Cairo, Ga.—Church edifice will be erected at cost of \$10,000. Plans are being prepared by Alexander Blair, Macon, Ga. Electric lighting will be used. W. B. Roddenberry is chairman of committee; date for opening bids not yet fixed.

Columbus, Ga.—First Baptist Church is having plans prepared by R. H. Hunt, Chattanooga, Tenn., for remodeling edifice at a cost of about \$20,000. (Mentioned in August.)

Chattanooga, Tenn.—Central Baptist congregation has secured permit for erection of edifice; brick and stone; cost \$25,000; Joseph W. Trimby, contractor.

Eufaula, Ala.—Baptist Congregation has adopted plans by Bruce & Everett, Atlanta, Ga., for erection of edifice; classic design; cost \$14,000; steam heat; electric lighting; date for opening bids not settled. (Recently mentioned.)

Farmington, Mo.—Charles F. May, Laclede Building, St. Louis, Mo., is preparing plans for church at Farmington; 58x71 feet; brick and stone; cost \$25,000.

Harrison, Tenn.—Baptist Congregation will erect edifice; Rev. J. S. Thrasher, pastor.

Hattiesburg, Miss.—Baptist church contemplates erecting edifice at a cost of \$30,000. Address The Pastor, Columbia Street Baptist Church.

Jackson, Tenn.—West Jackson congregation will erect edifice costing \$10,000; Rev. J. T. Early, pastor.

Kansas City, Mo.—First Baptist Congregation has had plans prepared by Sheppard & Farrar, Long Building, for erection of edifice; stone and terra-cotta; 86x139 feet; cost \$60,000.

Lynchburg, Va.—First Baptist Church has had plans prepared for erection of parsonage; contract will soon be awarded; Dr. Carter Helm Jones, pastor.

Mobile, Ala.—St. Francis Street Baptist Church will have plans prepared by R. H. Hunt, Chattanooga, Tenn., for erection of edifice; classic style; cost \$80,000.

Parkersburg, W. Va.—Elberon M. E. congregation will erect edifice; 66x120 feet; press brick; stone trimmings; cost \$40,000; contractor, John H. Daniels; building will have steam heat and electric lighting.

Seneca, S. C.—Baptist Congregation will erect parsonage. Address Pastor Baptist Church.

St. Louis, Mo.—English Evangelical Lutheran Church of Our Redeemer, recently noted to have plans prepared by Foell Architectural Co., 3349 California avenue, will erect edifice at cost of \$30,000; architects will submit contracts about November 14; building to be 76x92 feet; 800 seating capacity; steam heat; electric lighting.

Washington, D. C.—Washington Hebrew Congregation, Louis Stern, rabbi, 1315 Columbia road, will rebuild its synagogue on 8th street between H and I streets, which was damaged by fire to extent of \$15,000.

Woodville, Miss.—Methodist Church South will erect edifice to cost about \$10,000. Dr. T. O. Woods, W. P. S. Ventress and others have been appointed members of committee to consider plans.

COURTHOUSES

Cairo, Ga.—Grady County Commissioners have engaged Alexander Blair, Macon, Ga., to prepare plans for courthouse and jail building; contract to be let in January, 1908; fireproof; steam or hot-air heating; electric lighting; cost of courthouse \$40,000; cost of jail \$13,000; W. B. Roddenberry, chairman Board of County Commissioners. (Recently mentioned.)

Greensboro, Ala.—Commissioners' Court of Hale county has voted to make an additional loan of \$20,000 for completion of courthouse, for which \$35,000 of bonds have already been voted. Address County Judge.

Springfield, Ga.—Edgingham county contemplates building courthouse at a cost of \$30,000. Address County Commissioners.

DWELLINGS

Anniston, Ala.—Dr. A. N. Steele has engaged C. W. Carleton to prepare plans for residence recently mentioned; nine rooms; brick veneer; hot-water heating; electric and gas lighting; cost \$10,000.

Atlanta, Ga.—P. G. Turner will erect residence; cost \$8000; plans by Bruce & Everett; contract not let.

Baltimore, Md.—Walter L. Westphal, builder, 1700 North Bond street, will erect 40 two-story brick dwellings at southeast corner Milton avenue and Hoffman street, to cost \$50,000.

Baltimore, Md.—John E. Cullimore, builder, 1153 North Fulton avenue, will erect 10 three-story brick dwellings with modern conveniences at Whitelock street and Callow avenue, to cost \$50,000; Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street.

Baltimore, Md.—Joseph H. Schamberger, builder, 2122 East Baltimore street, will erect 24 two-story brick dwellings at 101-147 South Patuxent street, to cost \$58,000.

Baltimore, Md.—Waxman & Coraleschak, builders, will erect 11 two-story brick dwellings on Clement street, near Riverside avenue, to cost \$10,000; D. M. Callis, architect, 1221 North Broadway.

Baltimore, Md.—Augustus Hampson, builder, 207 St. Paul street, will erect 20 two-story brick dwellings on Druid Hill avenue between Whitelock street and Park terrace, to cost \$34,500.

Baltimore, Md.—Wm. J. Clendenin, builder, 1417 Thames street, will erect six two-story brick dwellings on Malakoff street between Washington and Chester streets, to cost \$5000.

Baltimore, Md.—Francis A. Lazenby, Bush and Wicomico streets, has awarded contract to Jacob Peters, 314 St. Paul street, for construction of 10 two-story brick dwellings on Bush street, between Wicomico and Hamburg streets, to cost \$10,000; J. E. Laferty, architect, 11 East Pleasant street.

Charleston, W. Va.—Mrs. Maxey will erect residence; two stories; 37x50 feet; cost \$5000; Charles G. Rabenstein, architect.

Dallas, Texas.—Samuel T. Morgan has had plans prepared by Willis & Overbeck for erection of residence; brick veneer; stone trimmings; cost \$15,000.

Dallas, Texas.—T. L. Bradford has had plans prepared by Willis & Overbeck for erection of residence.

Dallas, Texas.—R. W. Font's residence, contract for which was recently noted awarded to O. L. Wiley, will be 36x78 feet; hot-air heat; electric lighting; elevator; cost \$15,000; plans by Sanguinetti, Staats & Hall.

Deland, Fla.—C. D. Landis will erect residence.

Fort Worth, Texas.—Dr. M. M. Barnes has secured permit to erect four-room dwelling at a cost of \$5000.

Fredericksburg, Va.—W. H. Peden has contracted with F. P. Stearns for residence to cost about \$8000.

Gadsden, Ala.—Mrs. Fletcher Midgley has secured permit to erect residence; W. Mayben, contractor.

Galveston, Texas.—W. J. Chapman has purchased site 120x120 feet on which to erect residence.

Greenwood, Miss.—Mrs. Lella W. McCarty, Hemingway, Miss., will erect residence in Greenwood.

High Point, N. C.—Milt Jones, Thomasville, N. C., will erect dwelling near High Point.

Jacksonville, Fla.—E. A. Groover has secured permit to erect residence; 10 rooms; J. H. W. Hawkins, architect.

Little Rock, Ark.—Dr. J. P. Runyan is having plans prepared by Gibb & Sanders for erection of two-story white brick residence.

Louisville, Ky.—C. R. Shrader of Shrader Bros., contractors, 1005 West Jefferson street, will erect two residences; cost \$6000 each; plans by Arthur R. Smith, 209 Norton Building; buildings 38x27 feet; brick and stone; hot-air heating; electric and gas lighting; plumbing.

Memphis, Tenn.—E. E. Whitner has secured permit to erect two two-story brick-veneered residences of eight rooms, costing \$6000 each, one for himself and other for L. K. Thompson.

Memphis, Tenn.—J. L. Driver has awarded contract to Tatum Bros. for erection of residence; two stories; stone veneered; eight rooms; tile roof; cost \$10,000. (Recently mentioned.)

Mossneck, Va.—B. M. Skinker awarded contract to A. M. Garner, Fredericksburg, Va., for erection of residence at Mossneck.

Parkersburg, W. Va.—John H. Daniels has contracted to erect brick-veneered residence, cost \$10,000, for J. W. Roberts; plans by Richard H. Adair.

Richmond, Va.—John Garland Pollard will erect residence at Ginter Park, near Richmond; architect, C. K. Howell; two and one-half stories; main building 62x30 feet, wing 16x20 feet; reinforced concrete; ordinary construction; hot-water or vapor heat; electric lighting; date for opening bids not fixed.

Richmond, Va.—J. R. Paschall, Wise, N. C., will erect residence at a cost of about \$15,000 in Ginter Park, near Richmond.

Richmond, Va.—Thomas Gresham, Norlina, N. C., will erect residence costing about \$15,000 in Ginter Park, near Richmond.

Richmond, Va.—Charles G. Taylor is having plans prepared for erection of residence.

Richmond, Va.—Robert M. Kent will erect residence.

St. Louis, Mo.—William Manning will erect residence.

St. Louis, Mo.—John D. Plister has secured permit to erect residence; 11 rooms; two stories; brick; cost \$8400; C. J. Morean, contractor.

St. Louis, Mo.—Dorsey I. Jamison will erect residence.

Washington, D. C.—Harry Wardman, builder, 1333 G street N. W., will erect six two-story brick dwellings with heating systems at 3701-3711 14th street N. W. to cost \$15,000; A. H. Beers, architect, 1333 G street N. W.

Washington, D. C.—Harold E. Doyle, Reno road N. W., awarded contract to John Brennan, 946 Florida avenue N. W., for construction of two two-story frame dwellings at 3751 and 3755 Northampton street to cost \$11,000; A. M. Schneider, architect, Bond Building. Also contract to John Simpson & Sons, Chevy Chase, for construction of one frame dwelling, with electric wiring and fixtures and hot-water heating system, at 3735 Northampton street to cost \$5000.

Washington, D. C.—Lewis E. Breuninger, builder, 1122 Lamont street, will erect two two-story brick and pebble-dash dwellings with electric wiring and fixtures and hot-

water heating systems on 10th street, near Park road, to cost \$6000; N. R. Grimm, architect, 627 F street N. W.

Washington, D. C.—Robert S. McCormick, Chicago, Ill., has purchased lot fronting 300 feet on Massachusetts avenue, at intersection of U street N. W., and will erect large dwellings on site.

Washington, D. C.—H. B. Wilson, Wilson Building, 715 8th street N. W., will erect 16 dwellings with modern conveniences on 14th street near Spring road.

Washington, D. C.—Margaret E. Murphy has awarded contract to William Murphy, 1224 East Capitol street, for construction of three two-story brick dwellings with hot-water heating systems at 1309-1313 East Capitol street to cost \$12,000; Poynton & Webster, architects, 911 French street N. W.

Washington, D. C.—James Martin, builder, 1333 South Capitol street, will erect eight two-story brick dwellings with hot-air heating systems at 31-45 Adams street, to cost \$24,000; Edward O. Volland, architect, 311 R street N. W.

Washington, D. C.—Frank Mitchell has commissioned Horace Trumbauer, Land Title Building, Philadelphia, Pa., to prepare plans and specifications for dwelling at corner 19th and Q streets N. W. to cost about \$50,000.

Washington, D. C.—George R. Linkins, 610 13th street N. W., has awarded contract to C. A. Barker, 611 Ouray Building, for construction of one two-story-and-basement dwelling, with hot-water heating system, at 1332 Massachusetts avenue S. E. to cost \$5000.

Washington, D. C.—John H. Nolan, 1413 G street N. W., was the lowest bidder for construction of dwelling on 16th street, between Massachusetts avenue and M streets N. W., for Mrs. Norman Williams; four stories; 36x75 feet; Indiana limestone exterior; electric wiring and fixtures; sanitary plumbing; heating system; Wyeth & Cresson, architects, 1517 H street N. W.

Washington, D. C.—H. V. Sanford, 1321 G street N. W., was the lowest bidder for construction of dwelling on 16th street N. W. for Mrs. McGowan; four stories; brick with stone trimmings; modern conveniences; Wyeth & Cresson, architects, 1517 H street N. W.

HOTELS

Athens, Ga.—Company has been organized and is having plans prepared for erection of hotel to cost \$150,000; Billups Philizy, president; J. M. Hodgson, vice-president, and A. E. Griffith, secretary-treasurer.

Dublin, Ga.—Frank R. Roberson is conferring with an Atlanta (Ga.) architect relative to enlarging the Dublin Hotel, probably adding four stories; steam heat; private baths.

Fort Worth, Texas.—Buchanan & Glider have secured permit to erect hotel; four stories; 60 rooms; brick; cost \$82,000.

Gibbsland, La.—James & Conley will erect two-story hotel.

Gladewater, Texas.—J. E. Wood will erect 16-room hotel.

Houston, Texas.—Frank Heidelberg has contracted at \$50,340 to erect family hotel; three stories; brick; 100x100 feet; 52 rooms, with bath for each two rooms; O. H. P. Rudesill & Son, architects; construction work has begun.

New Orleans, La.—Audubon Hotel Co., Wm. Mason Smith, president, has filed contract, awarded some months ago, for construction of hotel, of which full details were stated last June; 15-story structure; 163x320 feet; stone, terra-cotta and steel frame construction; six passenger and two freight elevators, operated by electricity; Turkish baths; general power equipment; cold-storage plant; exhaust fans for ventilation, etc.; contract price, \$1,500,000; mechanical equipment, site, etc., to cost probably as much more; architects, Frank M. Andrews & Co. of New York; contractor, General Supply & Construction Co., Ralph P. Taylor, president, New York.

San Antonio, Texas.—Blismark Hotel Co. incorporated with \$10,000 capital stock by H. C. Schurmeier, Jacob H. Wagner, Jacob Barge and H. C. Schurmeier.

South Pittsburg, Tenn.—Dixie Portland Cement Co., George E. Nicholson, Iola, Kan., president, has awarded contract to Hunt Engineering Co., Iola, Kan., for erection of hotel; main building 117x36 feet and an L, in which will be located kitchen and dining-room; two stories high; 32 guest rooms, each 11x15 feet; lobby and office 20x35 feet; cement stucco; electric fixtures; steam heat; hot and cold baths.

MISCELLANEOUS STRUCTURES

Anadarko, O. T.—Business Building.—Hite Bros. will erect two-story business building;

55x60 feet; tile floor; Carthage-stone front; fireproof; steam heat; cost \$15,000; architects and contractors, Meeting Bros. (Recently mentioned.) (See "Machinery Wanted" column.)

Atlanta, Ga.—Residence.—R. S. Warthen awarded contract for erection of store building; cost \$5000; architects, Bruce & Everett.

Baltimore, Md.—Fire-department Building. Board of Awards, City Hall, has awarded contract to James F. Farley, Franklin Building, Baltimore and North streets, for construction of No. 4 truck house at 929-931 McCulloh street, at his bid of \$24,563; two stories; 42x100 feet; brick with granite base and terra-cotta trimmings; metal ceilings; electric wiring and fixtures; sanitary plumbing; steam-heating system. To be constructed under supervision of Edward D. Preston, Inspector of Buildings, City Hall.

Baltimore, Md.—Market Stalls and Shed.—Board of Awards, City Hall, has awarded following contracts to Joseph Schamberger, 2122 East Baltimore street: Erection of wooden stalls in Center Market at cost of \$940 and construction of shed with reinforced concrete walls and tile roof in Druid Hill Park at cost of \$5638. Work will be done under supervision of Edward D. Preston, Inspector of Buildings, City Hall.

Beaumont, Texas.—Business Building.—Pipkin & Brulin awarded contract to W. C. Whitney for erection of building recently mentioned; plans by F. W. Steinman; fireproof; gas heating; gas and electric lighting; hand-power elevator; cost \$9000.

Beaumont, Texas.—Business Building.—Heisig & Norvell will have plans prepared for erection of business building; probably three or four stories; L shape; 60x180x189 feet; brick; cost between \$30,000 and \$50,000.

Cairo, Ga.—Jail.—Grady County Commissioners have engaged Alexander Blair, Macon, Ga., to prepare plans for jail and courthouse building; fireproof construction; steam or hot-air heating; electric lighting; cost of jail \$13,000; cost of courthouse \$40,000; bids to be opened in January, 1908; W. B. Roddenberry, chairman Board of County Commissioners. (Mentioned recently.)

Charleston, W. Va.—Sanitarium.—Dr. F. S. Thomas is having plans prepared by Warden & Wood for erection of sanitarium; three stories and basement, 46x100 feet; press brick; stone trimmings; cost \$20,000.

Charleston, W. Va.—Stable.—Capitol Transfer Co. will erect stable; three stories, 59x128 feet; brick; mill construction; cost \$17,000. Henneman & Co., architects and builders, will prepare plans and erect the structure. George Gates has subcontract for brick work.

Charleston, S. C.—College of Charleston will award contract October 25 for converting Thomson Auditorium into museum building according to plans prepared by J. D. Newcomer.

Charleston, W. Va.—Sanatorium.—Dr. F. S. Thomas is having plans prepared by Warden & Wood for erection of sanatorium; three stories and basement; 46x100 feet; pressed brick; stone trimmings; cost \$20,000.

Charlotte, N. C.—Hospital.—Charlotte Sanatorium Co., D. A. Tompkins, president, has awarded contract to J. D. Brown for erection of brick hospital.

Cumberland, Md.—Roundhouse, etc.—Baltimore & Ohio Railroad Co. will not erect roundhouse and other buildings. (Recently incorrectly noted.)

Dallas, Texas.—Temple and Auditorium.—Hella Temple, Ancient Arabic Order of the Mystic Shrine, will erect temple and auditorium, to cost about \$150,000. John G. Hunter is chairman of committee in charge of organizing stock company, selecting plans, etc.

Dallas, Texas.—Business Building.—Overbeck & Willis have prepared plans for erection of three-story brick business building.

Elkins, W. Va.—Business Building.—John Ward, brick contractor, will erect business building.

Elkins, W. Va.—Business Building.—Joseph M. Woodford has had plans prepared by A. C. Lyons, Fairmont, W. Va., for erection of business building 60x30 feet.

Ellisville, Miss.—Jails.—Jones County Board of Supervisors has adopted plans and specifications by Southern Structural Steel Co. for erection of two brick jails, one at Ellisville and other at Laurel, Miss. Proposals are invited. Plans and specifications on file in office of Chancery Clerk.

Fort Sumter, S. C.—Wharf.—Sealed proposals in triplicate will be received until November 21 for construction of wharf at Fort Sumter, S. C. Plans and specifications furnished on application; United States reserves right to reject any or all proposals. Address J. M. Fulton, Quartermaster, Fort Moultrie, S. C.

Fort Worth, Texas.—Home.—The Home for Poor Children, recently mentioned, will be erected at cost of \$15,000; plans by Smith & Schenk; three stories; brick; acetylene-gas lighting; Mrs. E. H. Carter, chairman building committee.

Fort Worth, Texas.—Coliseum.—Fort Worth Stockyards Co. will erect at cost of \$150,000 exposition building known as "Coliseum," contracts for which were recently noted awarded to Moravian Construction Co. of Chicago and Texas Building Co. of Fort Worth; fireproof; one-story arena; 174x230 feet; steel, brick and concrete; located in North Fort Worth; architect, Berkeley Brandt, 1715 Railway Exchange, Chicago, Ill. Lake Charles, La.—Lodge Building.—Masonic Lodge has adopted plans by I. C. Carter for erection of building 68x120 feet; two stories; brick; stone trimmings; front ornamented with Texas granite columns; tile roof; main lodgeroom 48x70 feet; cost between \$15,000 and \$20,000.

Gatesville, Texas.—Reformatory.—J. L. Zimmerman, Cleburne, Texas, has contract at \$17,740 to erect dormitory at State Reformatory. Legislature has appropriated \$25,000 for erection of this dormitory and for new kitchen and dining-room, contract for which will be awarded later; H. C. Barlow, architect, Dallas, Texas; E. G. Douglass, assistant superintendent. (Recently mentioned.)

Grayville, Tenn.—Lodge, etc.—Sealed proposals in triplicate will be received until November 21 for constructing brick lodge and outbuilding, concrete walls and sidewalks, grading, etc., at Greenville National Cemetery. Plans and specifications can be had and information obtained on application to this office; United States reserves right to accept or reject any or all proposals. Address Major M. Gray Zalinski, Quartermaster, United States Army, Washington, D. C.

Hattiesburg, Miss.—Jail.—Forrest County Board of Supervisors has commissioned W. S. Hull, Jackson, Miss., to prepare plans for jail to be erected in Hattiesburg; three stories; stone and brick; fireproof; cost \$40,000.

Jackson, Miss.—Home.—Old Ladies' Home Association of Mississippi, Mrs. A. H. Lougino, president, has awarded contract to J. F. Barnes for erection of building; colonial style; three wings; main dimensions, 120x189 feet; brick; stone trimmings; slate roofing; steam heat; sanitary plumbing; cost about \$40,000; Harry N. Austin, architect. (Previously mentioned.)

Jacksonville, Fla.—Exposition Building.—Harry Monk, Norfolk, Va., has contract to erect building to be used for Florida mid-winter exposition; 400x300 feet; cost \$50,000.

Kansas City, Mo.—Hospital.—Builders' Material & Supply Co. has contract at \$6293 for marble work, and Wakefield Tile Co. at \$4985 for tile finishings in new general hospital.

Kansas City, Mo.—Business Building.—M. M. Evans will erect business building; two stories; 49x130 feet; brick and stone; cost \$12,000; Sheppard & Farrar, architects.

Kansas City, Mo.—Music Hall.—H. E. Hus elton will erect music hall after plans by Jas. Oliver Hogg, 945-67 New York Life Building; 99x135 feet; six stories; brick, stone and steel; steam heat; electric lighting; electric elevators; cost \$300,000; date of opening bids not decided. (Mentioned recently.)

Lake Charles, La.—Business Building.—Magnin & Reimers have contract to erect the Jonte building.

Lake Charles, La.—Business Building.—Gulf Grocery Co. has awarded contract to Delotte, Lagrange & Magnin for erection of building; two stories, 70x100 feet; corrugated iron; equipped with brick fireproof vault, elevators, etc.

Laurel, Miss.—Jail.—See item under Ellisville, Miss.

Leasburg, Mo.—Onondaga Cave Co. has had plans prepared by William Wedemeyer, Wainwright Building, for erection of clubhouse; two stories, 54x32 feet; frame; cost \$6000.

Lecompte, La.—J. W. Smith has awarded contract to J. M. Brown, Houston, Texas, for erection of two-story brick mercantile building.

Lexington, Ky.—Skating Rink, etc.—Lexington Coliseum Co. incorporated with \$10,000 capital stock by W. J. Geary, Paul Wettzel and J. W. Browning; has completed building, 50x240 feet, at cost of \$10,000. Building is heated by steam and has natural-gas lighting.

Louisville, Ky.—Store Building.—Shapinsky & Rothstein are having plans prepared for erection of store building 210x60 feet; brick; cost \$25,000.

Macon, Ga.—Store Building.—Wilder &

Paulin have contract to erect three-story store building.

Macon, Ga.—Lodge Building.—Grand Lodge of Georgia, A. F. & A. M., will remodel Masonic lodge building at cost of \$25,000; seating capacity 2000; brick building; electric lighting; W. B. Chapman, chairman property committee.

Manchester, Va.—Store Building.—Charles Burkert, 1105 Hull street, has awarded contract to R. D. Walker for erection of store building; two stories; 28x92 feet; cost \$6000; ordinary construction; hot-water heat; gas and electric lighting.

Memphis, Tenn.—A. W. Gettinsby has secured permit to erect store building for the Misses Hein; structure will be four stories; brick; stone trimmings; cost \$23,000.

Nevada, Mo.—Government Building.—Treasury Department, office of Supervising Architect, Washington, D. C. Sealed proposals will be received until December 3 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of U. S. Postoffice at Nevada in accordance with drawings and specifications, copies of which may be had at office of custodian of site at Nevada, or at this office, at discretion of Supervising Architect; James Knox Taylor, Supervising Architect.

Oklahoma City, O. T.—Home.—Committee has been appointed, with Brant Kirk, chairman, to secure plans and specifications and arrange for erection of home in some city in Oklahoma or Indian Territories for old Confederate soldiers; cost about \$10,000.

Oklahoma City, O. T.—Store Building.—T. P. Mellon is having plans prepared by Arthur J. Williams for addition to building; completed structure will have four stories; mill construction; brick; steam heat; electric lighting; 15-ton hand-power elevator. (Recently mentioned.)

Paris, Mo.—Poorhouse.—Monroe county has voted \$25,000 of bonds for erection of poorhouse. Address County Commissioners. (Recently mentioned.)

Pine Bluff, Ark.—Hospital.—Ladies' Hospital Association will erect hospital; D. A. Kendall, John F. Rutherford and others, board of directors.

Portsmouth, Va.—Government Building.—Bids will be received at Treasury Department, office of James Knox Taylor, supervising architect, Washington, D. C., until November 22 for erection (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of United States post-office and custom-house at Portsmouth, according to plans and specifications, copies of which may be obtained at office of custodian of site at Portsmouth or at above office, at discretion of supervising architect.

Rule, Texas.—Mr. Lewis, Hamlin, Texas, is reported to erect two-story brick store building 25x90 feet.

Rule, Texas.—Store Building.—G. D. Flowers will erect two-story brick store building 25x90 feet.

Rule, Texas.—Store Building.—William Van Cleave will erect two-story brick store building 25x90 feet.

Shreveport, La.—Business Building.—Hugh McLennan & Co., First National Bank Building, Chicago, Ill., have contract to erect the proposed Allen building; three stories; cost \$56,900.

Sparta, Ga.—Business Buildings.—D. P. Ferguson has awarded contract to A. V. Howell for erection of four business buildings.

St. Louis, Mo.—Mercantile Building.—Holbrook Blackwelder has had plans prepared by H. F. Roach, Syndicate Trust Building, for mercantile building; 25x106 feet; brick and reinforced concrete; cost \$70,000.

Sulphur, I. T.—Bathhouse.—M. H. Pemberton, Hot Springs, Ark., will erect bathhouse at Sulphur, I. T., costing \$50,000. Water will be supplied by artesian well.

Swainsboro, Ga.—Business Building.—Knights of Pythias Lodge No. 114 will erect building recently mentioned; architect not chosen; two-story building; 35x50 feet; store on ground floor; second floor, lodge hall; brick construction; electric lighting; cost \$5000; chairman building committee, H. H. Thompson.

Tuscaloosa, Ala.—Y. M. C. A. Building.—Young Men's Christian Association has awarded contract to R. M. Seacord for concrete work on new building to be erected.

Tyler, Texas.—Government Building.—Treasury Department, office of supervising architect, James Knox Taylor, Washington, D. C. Sealed proposals will be received until November 25 for construction, including plumbing, gaspiping, heating apparatus, electric conduits and wiring, of an extension, etc., to United States postoffice and courthouse at Tyler, in

accordance with drawings and specifications, copies of which may be had at this office or at office of custodian, at discretion of supervising architect.

Warren, Ark.—Postoffice.—E. A. Hahnel has contract to erect postoffice building of concrete blocks 50x60 feet.

Washington, D. C.—Store Building.—Arthur Copeland, 409 11th street N. W., will remodel building at 735 11th street N. W., for store purposes and will install electric wiring and fixtures and heating system. Wm. S. Spencer, 216 Bond Building; Fissell & Wagner, Home Life Building, and H. V. Sanford, 1321 G street N. W., are estimating on work; bids to be in October 21; Frederick B. Pyle, architect, 1003 F street N. W.

Washington, D. C.—Store Buildings.—J. S. Tyree, 15th and H streets N. E., has awarded contract to J. C. Yost, 715 9th street N. E., for construction of three one-story brick stores at 739-743 15th street N. E., to cost \$6000; Julius Germuller, architect, 456 Louisiana avenue N. W.

Washington, D. C.—Stable.—District Commissioners Henry B. F. Macfarland, Henry L. West and Jay J. Morrow will receive bids until October 26 for construction of stable in rear of District pumping station on Bryant street N. W.; two stories; 36x168 feet; brick with stone trimmings; slate roof; stalls for 36 horses; electric wiring and fixtures; sanitary plumbing; Wood, Donn & Deming, architects, 808 17th street N. W. Plans and specifications can be obtained on application to room No. 43 District Building.

Washington, D. C.—Icehouse.—American Ice Co., Samuel A. Kimberly, manager, 1437 Pennsylvania avenue N. W., will erect icehouse at corner 9th and Water streets S. W.; one story; 70x104 feet; mill construction; slag roof; concrete piling. Company will do its own construction; Frederick B. Pyle, architect, 1003 F street N. W.

Washington, D. C.—Home.—Washington Loan & Trust Co., 9th and F streets N. W., and William King, trustees, will shortly select site for "Home for Indigent Men," for the endowment of which about \$900,000 was left by the late Henry Dickson.

Waurika, O. T.—Kelly Bros. have awarded contract for erection of two-story business building costing about \$25,000.

MUNICIPAL BUILDINGS

Capitol Hill, O. T.—City contemplates calling an election to vote on issuance of \$10,000 of bonds to erect city building, including council-room, courtroom, etc. Address The Mayor.

Chattanooga, Tenn.—Fire Hall.—Brandon & Davis have contract at \$24,162 for erection of fire hall No. 6; brick and stone; two stories; central tower three stories high over main entrance.

New Orleans, La.—Wharf and Shed.—Dock Board, Hugh McCloskey, president, has approved plans for building 1600 feet of steel sheds over the St. Andrew street wharf and extending the Celeste street shed 480 feet, total cost to be about \$140,000. Specifications for work will be adopted later. (Previously mentioned.)

St. Louis, Mo.—City awarded contract to Cooney Construction Co. for remodeling east wing of poorhouse after plans by Dressler & Elchler; old structure to be fireproofed, have steam heat and electric lighting; cost \$25,000; C. M. Talbert, City Engineer.

Waurika, O. T.—City contemplates erecting city hall. Address The Mayor.

OFFICE BUILDINGS

Baltimore, Md.—Marshall Winchester & Co., 1214 Continental Building, has purchased lot, 17.5x51 feet, at southwest corner St. Paul and Fayette streets and will erect one-story banking office.

Columbus, Ga.—State Mutual Life Insurance Co., Rome, Ga., is reported as contemplating erection of seven-story office building in Columbus.

Cordele, Ga.—Cordele Building Co. will own bank building recently reported as to be erected; 50x100 feet; three stories; first story of stone; marble wainscoting and half-columns; ordinary construction; steam-heating; combination or electric-lighting fixtures; no elevators; wired for phones and electric lights; cost about \$35,000; contract awarded to Fred Wagener & Son of Cordele; architects, Lockwood Bros. of Columbus, Ga.

Devall Bluff, Ark.—Bluff City Bank will erect bank building; two stories; brick with St. Louis buff pressed-brick finishings; 24x60 feet.

Dothan, Ala.—First National Bank is having plans prepared by Ausfeld & Blount, Jackson Building, for erection of bank build-

ing; one story; Georgia marble; fireproof; cost \$65,000.

Douglasville, Ga.—Douglasville Banking Co. will erect bank building; Chattanooga pressed brick; marble trimmings.

Jackson, Miss.—State Bank & Trust Co. will not erect bank building as was reported.

Kansas City, Mo.—J. E. Brady, president Merchants' Refrigerating Co., has secured 99-year lease on site, 50x115 feet, and will erect 10-story fireproof building for office or commercial purposes.

Lawton, O. T.—First National Bank has awarded contract for erection of bank building; pressed brick; lateral dimension, 140 feet; cost about \$50,000; W. H. Quinette, vice-president.

Lynchburg, Va.—People's National Bank is reported to erect bank building.

Macon, Ga.—R. H. Smalling is contractor in charge of erection of Citizens' National Bank building; 58x88 feet; front of pressed brick and marble; tile flooring. (Recently mentioned.)

Mayville, Ky.—Lane & Easton have contract to erect store and office building for M. Zweigart according to plans by C. C. & E. A. Weber, Cincinnati, Ohio. Structure will be four stories; press brick; electric lights; cost \$15,000. (Recently mentioned.)

Montgomery, W. Va.—Montgomery National Bank is having plans prepared by Charles G. Rabenstein, Charleston, W. Va., for erection of bank building; 41x60 feet; press brick; stone trimmings; cost \$9000.

Mooresville, N. C.—Merchants and Farmers' Bank, E. W. Brawley, president, will erect bank building.

Moss Point, Miss.—Pascagoula National Bank, Pascagoula, Miss., has awarded contract to the J. T. Haire Company, Gulfport, Miss., for erection of bank building; one story; brick and stone; cost \$7000.

Mt. Olive, N. C.—Citizens' Bank, J. E. Kelly, president, awarded contract to J. F. Arge, Goldsboro, N. C., for erection of bank building after plans by L. A. H. Koeth, Wilmington, N. C.; two stories; 22x60 feet; bank on first floor; offices above; fireproof; electric lighting; cost \$6500.

Olla, La.—Olla State Bank has awarded contract for erection of two-story building.

Paducah, Ky.—Dr. D. G. Murrell has not let contract for erection of two-story business and office building recently mentioned; plans by A. L. Lassiter; brick; steam heat; combination lighting; cost \$8000.

Ponca City, O. T.—Farmers' National Bank will erect building at cost of \$15,000; contract awarded to O. K. Keck; architect, S. A. Layton, Oklahoma City, O. T.; brick building; 25x90 feet; white-stone trimmings, hand rubbed; tile floors; hot-water heating; electric lighting.

Richmond, Va.—Mutual Assurance Society has had plans prepared for erection of three additional stories to building. About \$250,000 will be expended in improvements. Edwin A. Palmer is secretary.

Tryon, N. C.—Bank of Tryon will erect two-story brick bank building; 25x50 feet.

RAILWAY STATIONS

Alexandria, La.—St. Louis, Iron Mountain & Southern Railway, James W. Way, consulting engineer, St. Louis, Mo., and Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas, Texas, will erect union station in Alexandria; passenger depot to be of brick and freight station of frame; total cost \$70,000.

Bessemer, Ala.—Birmingham Railway, Light & Power Co.'s passenger and freight depot, recently noted to be erected, will approximate 150x30 feet in size; brick; iron conduits; architects, Ford, Bacon & Davis of New York; branch office, 2100 First avenue, Birmingham, Ala.

Corpus Christi, Texas.—Texas-Mexican Railway, James M. Reid, chief engineer, City of Mexico, Mex., and the St. Louis, Brownsville & Mexico Railroad, E. C. Burgess, chief engineer, Corpus Christi, Texas, will erect joint depot at Corpus Christi; brick; cost \$8000.

Fort Smith, Ark.—Kansas City Southern Railway will erect freight depot at cost of \$20,000. Plans are being revised by company's draftsmen; to be 40x250 feet; electric lighting; A. F. Rust, resident engineer, Kansas City, Mo.

Grand Point (P. O. Breaux Bridge), La.—Southern Pacific Company is understood to be erecting depot and section-house at Grand Point; W. G. Van Vleck, Houston, Texas, manager of company's lines in Texas.

Mercedes, Texas.—St. Louis, Brownsville & Mexico Railroad, E. C. Burgess, acting chief

engineer, Corpus Christi, Texas, will erect combination freight and passenger depot at Mercedes; brick; cost \$4000.

Waxahachie, Texas.—Missouri, Kansas & Texas Railway, S. B. Fisher, St. Louis, Mo., chief engineer, is reported to build passenger station at Waxahachie.

Parkersburg, W. Va.—Parkersburg, Marietta & Interurban Street Railway Co. will erect freight station.

SCHOOLS

Athens, Ga.—City contemplates erecting school building. Address The Mayor.

Auburn, Ala.—Alabama Polytechnic Institute Carnegie library building, for which N. C. Curtis was recently noted to prepare plans, will be erected at cost of \$35,000; two stories; 76x50 feet, and also large stockroom addition; exhaust steam heating plant; electric lighting; bids to be opened about January 15.

Bardstown, Ky.—Commissioners of Bardstown Graded Common School District have not engaged architect to prepare plans for school building recently mentioned; approximate cost, \$25,000; Redford C. Cherry, secretary Board of Trustees, desires to correspond with architects and contractors.

Chattanooga, Tenn.—McKnight & Parker have contract at \$125,472 to erect two school buildings, one on Moon avenue and other in South Annesdale; structures to be of brick; stone trimmings; two stories. School board also contemplates erecting a similar building in North Memphis to replace present Pope school.

College Station, Texas.—Agricultural and Mechanical College buildings (recently mentioned) will be erected at cost of \$50,000 for dormitory, \$10,000 for bathhouse and \$5000 for veterinary hospital; architect, S. W. Smith, Dallas, Texas; brick construction; electric lighting; bids to be opened October 28; H. H. Harrington, president.

Conway, Ark.—State Department of Education, J. J. Doyle, superintendent, contemplates early expenditure of \$65,000 in erection of State normal school recently mentioned; total cost not yet decided. C. L. Thompson, Little Rock, Ark., is preparing plans.

Dallas, Texas.—City will erect school building, for which bonds were recently reported voted; plans by Wm. F. Nicol; ordinary construction; steam heat; cost about \$30,000; date of opening bids not decided; T. G. Terry, secretary Board of Education.

Dublin, Ga.—City will vote December 9 on issuance of \$15,000 of bonds for erection of two school buildings. Address The Mayor. (Recently mentioned.)

Ferguson, Mo.—Brothers of Mary awarded contract for erection of Villa St. Joseph after plans by Victor J. Klutho, 302 North 9th street, St. Louis, Mo. Structure will be of frame; two stories and basement; 48x61 feet; cost \$10,000. Mr. Klutho is also preparing plans for other buildings to be erected by the order in St. Louis county. It is understood that \$150,000 will be expended.

Fort Smith, Ark.—School Board, J. W. Kuykendall, superintendent, will award contract within 30 days for erection of school building; three stories; 94x156 feet; brick; white stone trimmings; corridor, 23 feet wide; cost \$60,000. Plans have been prepared by A. Klingensmith.

Glenwood, Texas.—City has voted issuance of \$14,400 of bonds for erection of school building. Address The Mayor. (Recently mentioned.)

Greensboro, Ga.—City will award contract November 12 for erection of proposed school building, including heating, plumbing and seating, according to plans and specifications prepared by C. Gadsden Sayre, Anderson, S. C.; certified check, \$500, payable to J. H. McWhiter, clerk; usual rights reserved; J. H. Gheesling, Mayor.

Hebron, Miss.—A. W. McDaniels, Mount Olive, Miss., has contract to erect school building at Hebron, costing \$4000.

Lenoir City, Tenn.—School building recently mentioned, bids for which were noted to be awarded October 22, will be of press-brick construction, with slate roof; 80.6x65.4; steam heat; electric lighting; plans by Baumann Bros., Knoxville, Tenn.; John F. Eason, chairman building committee.

Lineville, Ala.—City will erect school building, for which bonds were recently reported voted; cost \$12,000; brick; fireproof; plans not prepared; R. D. Evans, Mayor.

Lometa, Texas.—Bids will be opened October 30 for erection of two-story brick school building. Plans, specifications and full information may be obtained at Lometa State Bank and office of architects, Scott & Lane, Waco, Texas; usual rights reserved.

Montevallo, Ala.—Alabama Girls' Industrial School, T. W. Palmer, president, has awarded contract to Barbour Plumbing & Electric Co., Birmingham, Ala., for installation of heating system at \$11,463 and for electric wiring at \$659, and to the Alabama Supply Co., Birmingham, Ala., at \$4900, for plumbing. (Mentioned in September to erect dormitory for which contract had been awarded to the E. C. Seize Company, Atlanta, Ga.; plans prepared by W. E. Splink, Birmingham, Ala.)

Morristown, Tenn.—Normal and Industrial College is having plans prepared by Cropser & Lamm, Cincinnati, Ohio, for erection of administration building; T-shaped; 131x47 feet and 54x47 feet; pressed brick; contain library, chapel and study-rooms with seating capacity of 500; cost \$40,000.

Nashville, Tenn.—Bids will be received at office of Robert Sharp, architect, Cole Building, until October 23 for different branches of work required in erection of school building; Board of Education reserves usual rights; plans and specifications at office of architect.

Oklahoma City, O. T.—Henry Kendall College will expend about \$100,000 in erection of six buildings, including administration hall, two dormitories, dining hall and residences for the president and dean of the faculty.

Prairie View, Texas.—Plans have been prepared and bids will soon be invited for construction of dormitory and science hall at the State Normal and Industrial College (branch of Agricultural and Mechanical College). Improvements were previously mentioned to include larger chapel or assembly hall and dormitory to cost \$17,500; addition to present laundry steam plant; new agricultural building; two-story brick building for mechanical department; sewer system to cost \$5000, etc.; E. L. Blackshear, principal.

Rogers, Ark.—City will erect school building. Address The Mayor.

Rosslyn, Va.—Arlington District School Board, James E. Clements, superintendent, Rosslyn, Va., will receive bids until October 31 for construction of two-story and basement school building with modern conveniences, to cost about \$15,000. Plans and specifications can be obtained on application to Wm. A. E. McShea, secretary, Bank Building; N. R. Grimm, architect, 627 F street N. W., Washington, D. C.

Sapulpa, I. T.—City will vote on issuance of \$50,000 of bonds for school purposes, etc. Address The Mayor.

St. Louis, Mo.—St. Agatha congregation is having plans prepared by Joseph Stauder & Son, Temple Building, for school and hall; 80x125 feet; brick and stone; cost \$50,000.

University, Ala.—University of Alabama has instructed Frank Lockwood, architect, Montgomery, Ala., to complete plans and specifications at once and advertise for bids for erection of fireproof geological and biological building to cost \$100,000, combined power plant and engineering building and general academic building. Building committee will report in about three weeks, and it is expected that board of trustees will then award contract. Architect was also directed to prepare plans and specifications for enlargement of present chemical laboratory and improvement of existing structures; G. H. Jones, burser. (Recently mentioned.)

Washington, D. C.—District Commissioners will shortly ask for bids on construction of addition to McKinley Manual Training School at corner 7th street and Rhode Island avenue N. W. after plans by Lemuel W. Norris, architect, 803 17th street N. W.; three stories; 93x135 feet; brick with limestone trimmings; structural iron and steel; reinforced-concrete floors; terra-cotta partitions; slag roof; electric wiring and fixtures and plant; sanitary plumbing; steam-heating system.

Washington, D. C.—Henry B. F. Macfarland, Henry L. West and J. J. Morrow, District Commissioners, District Building, have commissioned Marsh & Peter, architects, 520 13th street N. W., to prepare plans and specifications for school building to be erected at Mt. Pleasant; four stories; brick with stone and terra-cotta trimmings; modern conveniences; cost about \$125,000.

Washington, D. C.—Henry B. F. Macfarland, Henry L. West and J. J. Morrow, District Commissioners, District Building, have commissioned Leon E. Dessez, architect, 1421 F street N. W., to prepare plans and specifications for school building; three stories; brick with stone trimmings; structural iron and steel; modern conveniences; cost about \$85,000.

Washington, D. C.—Henry B. F. Macfarland, Henry L. West and J. J. Morrow, District Commissioners, District Building, will receive bids until November 9 for construction of addition to McKinley Manual Training School at 7th street and Rhode Island avenue N. W.; three stories, 93x105 feet; brick with Indiana limestone trimmings; structural iron and steel; reinforced concrete floors; terra-cotta partitions; slag roof; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost about \$130,000. Electric generating plant, foundry and carpenter shop will be installed in building; L. W. Norris, architect, 803 17th street N. W. Plans and specifications may be obtained from Room No. 43, District Building.

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THEATERS

Hattiesburg, Miss.—Mort L. Bixler, manager of the Hattiesburg Auditorium, will organize stock company to erect theater with seating capacity of 1300.

WAREHOUSES

Alleene, Ark.—Farmers' Union of Little River County, F. K. Davis, president, is reported to erect warehouse.

Alvord, Texas.—Farmers' Union Warehouse Co. incorporated by A. A. C. Williams, W. B. Simmons, G. A. Gill, J. F. Brenner and others; will erect fireproof warehouse, 64x96 feet, at cost of \$1750.

Baltimore, Md.—Horace A. McSherry, 219 Courtland street, has purchased lot, 82x81 feet, on Conway near Charles street for client, who will erect warehouse on the site.

Breaux Bridge, La.—Waters-Pierce Oil Co. will erect warehouse.

Elizabeth City, N. C.—W. J. Woodley awarded contract to T. A. Powers for construction of two-story brick warehouse recently mentioned; electric lights; hand-power elevator; cost \$3000.

Fayetteville, N. C.—Underwood Warehouse Co. incorporated with capital stock of \$5000 by John Underwood, J. F. L. Armfield and M. D. Armfield.

Gates, Texas.—Farmers' Union Warehouse Co. incorporated by W. H. Poindexter, C. N. Wilkes, L. F. Adcock and others.

Hazlehurst, Miss.—Copiah County Farmers' Union Warehouse Co. incorporated with \$10,000 capital stock.

Little Rock, Ark.—Great Western Oil Co. will erect two-story brick warehouse to cost \$5000; C. L. Canada, contractor.

Lufkin, Texas.—W. T. Townsend, Sr., has closed contract for erection of warehouse; 25x140 feet; sheet iron.

Magazine, Ark.—Farmers' Union Warehouse Co. incorporated with \$6000 capital stock. J. K. Dempsey is president, J. A. Dorman vice-president and T. P. Landers secretary-treasurer.

Marshville, N. C.—North Carolina Cotton Association has appointed committee, consisting of M. K. Lee, S. L. Harrell and others, to promote erection of cotton warehouse.

Meridian, Miss.—S. A. Nevill, Meyer-Nevill Hardware Co., has had plans prepared for erection of warehouse.

Plain Dealing, La.—Reported that Farmers' Union will erect warehouse.

Pochontas, Ark.—Farmers' Union will erect warehouse; I. D. Redwine, president board of directors.

Sandersville, Miss.—Sandersville Farmers' Union Warehouse Co. incorporated with \$10,000 capital stock by J. A. McGill, J. F. Doggett, W. C. Hinton and others.

Seminary, Miss.—Covington County Farmers' Union, capitalized at \$10,000, will erect warehouse with capacity of 2000 bales. Contract has been awarded to J. H. Meyers, Houston, Texas.

Shreveport, La.—North Louisiana Cotton Planters' Association has perfected plans for organizing a warehouse and holding company with \$1,000,000 capital stock and elected J. M. Robinson president, J. Homer Jordan vice-president and T. H. Thurmond secretary.

Utica, Miss.—Cotton Growers' Warehouse Co. has engaged Norcross & Co., Atlanta, Ga., to prepare plans for erection of cotton warehouse recently mentioned; fireproof building; bids to be opened in about three weeks; correspondence with contractors desired.

Washington, D. C.—Harry Wardman, builder, 1233 G street N. W., will erect warehouse at 37 New York avenue N. E.; two stories; 41.3x139 feet; brick with stone trimmings; slag roof; electric wiring and fixtures; hot-water heating system; cost \$6000; A. H. Beers, architect, 1333 G street N. W.

Waxhaw, N. C.—North Carolina Cotton Association has appointed committee, consisting of Jesse A. Williams, J. L. Rodman and others, to promote erection of cotton warehouse.

RAILROAD CONSTRUCTION

RAILWAYS

Atlanta, Ga.—The Atlanta, Birmingham & Atlantic Railway has, it is reported, completed its line to a point within 31 miles of Atlanta, and this distance is expected to be covered by December 1.

Beaver City, O. T.—The Beaver Valley & Northwestern Railroad Co., capital \$4,000,000, has been chartered to build a line from Oklahoma City via Beaver City to La Junta, Col., running through 11 counties in Oklahoma, a small part of Kansas, and thence into Colorado. The incorporators are J. W. Webb, Ray Barnes, A. F. Rock, J. Blanchard, F. C. Tracy, W. H. Wilbur, Albert Wellborn, H. D. Meese, H. P. Garrett, Elbert Clift, D. M. Klie, Will T. Quinn and J. R. Quinn, all of Beaver City.

Cairo, Ga.—Capitalists of Valdosta, Cordele and Atlanta propose, it is reported, to build a railroad from Cairo south via Havana, Fla., to the Gulf of Mexico and northward to Pelham, Ga. The Cairo Lumber Co. may be interested.

Cassville, Mo.—The Cassville & Western Railway will, it is reported, build extensions both east and west. S. M. Mitchell is president and general manager at Cassville.

Center, Texas.—The Gulf, Colorado & Santa Fe Railway Co. has just amended its charter for building the proposed connection from Center to Timpson, Texas, 17 miles, to unite the Gulf, Beaumont & Great Northern and the Texas & Gulf Railroads. The Texas & Gulf is also to be extended northward from Longview, Texas, to connect with the Santa Fe north of the Red river. C. F. W. Felt is chief engineer at Galveston, Texas.

Covington, Tenn.—The Memphis, Covington & Northern Railway Co. has been chartered with \$14,000 capital to build a line in Covington, Tenn., and also an interurban railway in Tipton and Shelby counties. The incorporators are G. B. Gillespie, John T. Garner, J. B. Witherington, W. M. Abernathy, H. N. Sullivan, C. H. Stovall, W. A. Black and R. W. Sanford.

Fairmont, W. Va.—The Fairmont & Southern Railroad Co. has elected officers as follows: President, Charles E. Conway of Fairmont; vice-president, Charles F. Teter of Philippi, W. Va.; secretary, W. H. Conway of Fairmont; treasurer, Samuel A. Moore of Philippi. The company, it is said, will use 70 miles of grade built several years ago for the Buckhannon & Northern Railway, construction on which was abandoned.

Fayette, Miss.—An officer of the Yazoo & Mississippi Valley Railroad (Illinois Central system) informs the Manufacturers' Record that the company does not contemplate the construction of a branch from Melton Station to King's Point. This denies a recent press report.

Floydada, Texas.—Mr. W. M. Massie, president and general manager of the Llano Estacado Railroad Co., writes the Manufacturers' Record that the proposed line is from Floydada northwest about 30 miles to a connection with the Canyon City-Plainview branch of the Santa Fe. The company is not yet ready to let contract, but it is expected to have about 30 miles in operation within 10 months. A. B. Axtell is chief engineer at Canyon City, Texas.

Fort Smith, Ark.—The Kansas City Southern Railroad Co. will, it is reported, spend on the new yards at Fort Smith nearly \$12,000. It will also build a new main line through Fort Smith, according to present plans and surveys. A. F. Rust is engineer at Kansas City, Mo.

Greenville, Texas.—Mr. J. T. Jones, chairman of the executive committee, informs the Manufacturers' Record that the proposed interurban railway from Greenville via Wolf City to Bonham is only in its primary stages. A civil engineer will be engaged immediately to survey and locate the line, which, it is expected, will occupy two or three months. When this is done the company will be incorporated, and it is intended to begin construction early next spring. The line will be about 35 miles long and will have local railways in each of the three cities.

Houston, Texas.—The International & Great Northern Railroad is reported to have begun survey for additional track in Houston. O. H. Crittenden is engineer at Palestine, Texas.

Huttonsville, W. Va.—The Western Maryland Railroad Co., it is reported, contemplates building an extension from Huttonsville to Webster Springs, W. Va., 40 miles. J. Q. Barlow is chief engineer at Baltimore, Md.

Joplin, Mo.—The Manufacturers' Record is

informed that the Joplin & Pittsburg Railway Co. contracted with A. L. Register & Co. of Philadelphia to build about 50 miles of line, and they now have under construction 25 miles of interurban electric railway between Joplin, Mo., and Pittsburg, Kan. They are also building 10 miles of electric railway in Joplin, besides six miles between Seamon and Mineral, Kan. A five-mile branch from Pittsburg to West Curranville, Kan., and another five-mile branch not yet fully determined are also to be built.

Joplin, Mo.—The Southwest Missouri Electric Railway is reported to have added 10 miles of new line to its trackage and will soon have cars in operation from Joplin to Duenweg. The main line extends from Carthage, Mo., to Galena, Kan., 31 miles.

Lafayette, La.—James J. Lewis of Eunice, La., is reported as saying that another new railroad company will be organized within two weeks to build a line out of Eunice. This is in addition to the Eunice, Lafayette & Abbeville Railroad, of which he is president.

Lake Charles, La.—The Cobb Car Co. has been granted a franchise to build a standard-gauge railway over several streets.

Lumberton, N. C.—The Virginia & Carolina Southern Railroad has put in use 11 miles of its line and is about to extend it two miles farther to St. Paul's, 13 miles from Lumberton.

Lawton, O. T.—The Wichita Falls, Lawton & Northwestern Railroad Co. has, it is reported, filed a mortgage to secure bonds for \$63,000 to complete its line from Red River to Lawton, 40 miles. J. M. Bellamy is president at Lawton. The Commonwealth Trust Co. of St. Louis is interested.

Little Rock, Ark.—The Rock Island system, it is reported, will build a belt line in Little Rock in connection with its other projected improvements. J. B. Berry is chief engineer at Chicago, Ill.

Little Rock, Ark.—An officer of the Rock Island system writes the Manufacturers' Record that the amounts which it was reported the company would expend at Little Rock and other points are stated too large. Only four storage tracks are being built at Little Rock; at Winnfield some buildings and a yard will cost about \$150,000; at Eldorado, \$250,000. H. Dalhoff of Little Rock has grading contract at Little Rock and Winnfield, Ark. No contract yet let at Eldorado. H. G. Clark, district engineer, is in charge.

Marshall, Texas.—Mr. Ben B. Cain, Tyler, Texas, informs the Manufacturers' Record that he represents a majority of the bondholders, and plans have been considered to rehabilitate the property of the Texas Southern Railway and reorganize the company. Plans are not matured. The road is now in the hands of a receiver, and until a sale has been made nothing can be done. C. L. Taylor is receiver at Marshall, Texas.

Mexia, Texas.—F. W. Stefer is reported to be surveying for the proposed railroad from Mexia to Fairfield, Texas.

Mexico, Mo.—A. W. Carpenter of Memphis, Mo., is reported to be arranging to build an electric railway from Mexico to Memphis and Donald Fitzgerald, 80 Wall street, New York, is named as promoter. Construction is expected to begin next spring.

Mill Creek, W. Va.—An officer of the proposed Valley River Railroad Co. is reported as saying that the proposed line will be 43 miles long from Mill Creek to Clover Lick, W. Va. Survey is partly made. W. A. Dromgold is president at York, Pa. John Alden is chief engineer at Elkins, W. Va. J. G. Hoffman, Jr., is vice-president. L. E. Shull is secretary and general manager at Mill Creek, W. Va.

Muskogee, I. T.—Reported that the Missouri, Oklahoma & Gulf Railway proposes to build an extension from Wapanucka to Sulphur, I. T. C. D. Hamilton is superintendent of construction.

New Iberia, La.—The Bayou Teche Electric Light & Railway Co. has, it is reported, let contracts to build its line in New Iberia and also from New Iberia to Jeanerette. P. M. Schneidau is president.

Pecos, Texas.—Reported that citizens have organized to build the Pecos, Saragosa and Balmorhea Railroad; capital \$40,000. The proposed line is from Pecos to Balmorhea, 40 miles. The Mayor may be able to give information.

Piedmont, W. Va.—The Baltimore & Ohio Railroad is reported to have let a contract to F. H. Clement & Co., of Philadelphia to build a line for a flying junction on the 17-mile grade.

Radford, Va.—The Radford & Carolina Railway Co. has been chartered to build a steam railroad from Radford to the North

Carolina boundary through Patrick, Floyd, Carroll, Pulaski and Montgomery counties in Virginia. Capital, \$2000 to \$10,000. The incorporators are: President J. J. Mott, Statesville, N. C.; J. Hoge Tyler, vice-president; R. L. Jordan, J. L. Vaughan, J. A. Baird, secretary; Selden Longley and J. H. Carper, all of Radford, Va.

Rusk, Texas.—The State is pushing work on the extension of its railroad to Palestine, Texas, and about three miles are practically completed. When the line is finished it will be 32 miles long, from Rusk to Palestine.

San Antonio, Texas.—Reported that Northern capitalists contemplate building an electric interurban railway from San Antonio via Seguin and Lockhart to Austin, Texas, and have secured options on water-power on the Guadalupe river between New Braunfels and Seguin. The San Antonio Board of Trade may be able to give information.

Sanford, Fla.—Dr. George T. Bennett of Orlando, Fla., is reported as saying that he is interested in promoting an electric-light, power and railway company which will build a line from Sanford via Orlando to Kissimmee, Fla., 40 miles, and subscriptions are now being secured.

Tampa, Fla.—The Tampa & Sulphur Springs Traction Co. will, it is reported, increase its capital stock from \$100,000 to \$300,000 to build its proposed extensions. The directors are A. W. Swann, Eugene Holsinger, L. Brill, who is manager; Josiah Richardson and Dr. F. W. Inman.

Tarboro, N. C.—Dr. J. A. McLeay of Atlanta, Ga., is reported to be promoting plans to build a railroad from Hamilton, N. C., via Tarboro to Rocky Mount, N. C. It is also reported that several construction companies are making estimates for the line.

Tennille, Ga.—The Wrightsville & Tennille Railroad Co. has been granted permission to issue \$250,000 of bonds, proceeds to be used for betterments. A. F. Daley is president at Tennille.

Velasco, Texas.—Felix Jackson, vice-president and general manager of the Houston & Brazos Valley Railroad, is reported as saying that the extension will be from Anchor to Duke, Texas, 25 miles, and that about four miles are completed. Plans to build as far as Houston are not matured.

Vinita, I. T.—The Coffeyville & Memphis Railroad Co. is reported to be taking steps to build its proposed line from Coffeyville, Kan., via Centralla to Vinita, and thence to Little Rock, Ark.; headquarters at Coffeyville, Kan.; capital \$1,000,000. Bonuses have been pledged.

Waycross, Ga.—Reported that construction has been resumed on the Waycross, Nashville & St. Mary's railway, and the line to Nashville will be resumed to completion. It will be 60 miles long, and is being constructed by the Bailey Company and others of Waycross. Now 12 miles are completed and 25 miles of rail are on hand, while an order has been placed for 17 miles more.

Weatherford, Texas.—The Chicago, Weatherford & Brazos Valley Railroad Co. will, it is reported, build a line 38 miles long between Weatherford and Bridgeport, Texas, via Springtown or Pooleville. This statement is credited to Gid R. Turner, who also proposes to build an interurban railway from Fort Worth via Weatherford to Mineral Wells, but he declines to state whether the line will be steam or electric.

STREET RAILWAYS

Abilene, Texas.—The Abilene Electric Railway Co. will, it is reported, complete six miles of track and put it in operation by January 1. President, Edward T. Hughes; general manager, A. W. Bradshaw.

Alexandria, La.—The Kent Land Co., Ltd., has, it is reported, bought control of the Alexandria Electric Street Railway. Improvements may be made.

Ensley, Ala.—The Ensley Street Railway Co. has been incorporated to build a line in Ensley and adjacent territory. Capital, \$5,000. The incorporators are J. J. Walker, president and general manager; H. S. Meade, vice-president; J. D. Matlock, secretary and treasurer, and B. R. Pegram.

Macon, Ga.—The Macon Railway & Light Co. has, it is reported, been purchased by W. J. Massee, John T. Moore and others, and improvements are projected. Mr. Massee is president.

Oklahoma City, O. T.—The Oklahoma Light, Power & Fuel Co. has filed mortgages to secure \$5,000,000 of bonds, half of which will be used for street-railway improvements.

Oklahoma City, O. T.—The Oklahoma Railway Co. of Oklahoma City has, it is reported, been granted a franchise in Edmond and will build an extension immediately from

Britton to Edmond, about seven miles. J. W. Shartel is general manager.

Wilmington, N. C.—The Tidewater Power Co. has, it is reported, taken over the Consolidated Railway, Light & Power Co. in order to finance improvements under way and proposed.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Pumps.—W. A. Grimes, R. F. D. No. 1, Sparta, Ga., wants addresses of manufacturers of air pumps.

Automobiles.—Kirk Munroe, president Dade Transit Co., Miami, Fla., wants two passenger automobiles; seating capacity 12 to 20.

Bag Machinery.—Ashcraft Cotton Mills, Florence, Ala., wants folders, cutters, etc., for bag manufacturing; especially wants information of machine that takes cloth in the piece, folds it correct size, cuts it off and sews up, requiring one operator.

Bakery Equipment.—C. E. Ard, Agricultural College, Miss., wants equipment of bake oven and labor-saving appliances and utensils for mess hall.

Blinds.—Cement Construction Co., Moultrie, Ga., is in market for 20 pairs weighted inside sliding blinds.

Boiler.—Chester Ice Co., Chester, S. C., is in market for 100 and 125-horse-power boiler. Correspondence invited, with catalogues.

Boiler.—Key West Barracks, Florida.—Sealed proposals in triplicate will be received until November 12 for furnishing one steam boiler, 125 horse-power, with all accessories, complete. Bids will state price f. o. b. both Key West, Fla., and Mallory Steamship Line, New York city. Information and blanks furnished on request. Address Quartermaster, Key West Barracks, Florida.

Boilers.—Joseph H. Wallace, Temple Court Building, New York, N. Y., wants prices (duplicate estimates) on two 125-horse-power return-tubular boilers; second-hand; delivered f. o. b. Roanoke Rapids, N. C.

Boiler-works Equipment.—Twin City Boiler Works, 304 8th street, Bristol, Va.—Tenn., in market for one set bending rolls, six feet between housings, to bend half-inch plate; punch and shear to punch seven-eighths-inch in seven-eighths-inch and shear half-inch plate; throat about 24 inches; second-hand will be considered.

Brick Machinery.—J. H. Allen, Mayor, Bastrop, La., wants brick machinery.

Brick Machinery.—Max Frauenthal, Heber, Ark., wants addresses of manufacturer of brick machinery.

Brick Plant.—Okmulgee Brick & Mining Co., S. J. Allen, general manager, Okmulgee, I. T., will be in market for supplies for brick plant.

Bridge Construction.—Bids will be opened November 20 for construction of steel draw-bridge across Mingo creek. For further information address J. B. Johnson, Supervisor of Georgetown county at Georgetown, S. C., or Supervisor of Williamsburg county at Kingstree, S. C.

Bridge Construction.—Beaufort County Commissioners, Gilbert Rumley, clerk, Washington, N. C., will open bids November 4 for construction of two bridges in Beaufort county. Plans and specifications on file in office of clerk; usual rights reserved.

Bridge Construction.—G. S. Gordon, County Judge of Wharton county, Wharton, Texas, will open bids November 11 for erection of steel bridge over San Bernard river, 325 feet wide. Structure will be built jointly by Wharton and Fort Bend counties, Texas. Plans and specifications, etc., on file at office of G. S. Gordon at Wharton, Texas, or of D. R. Pearson, County Judge of Fort Bend county, Richmond, Texas, or can be obtained at office of H. Pennington, engineer, Theater Building, Houston, Texas.

Bottles.—Goeppinger Brokerage Co., Waco,

Texas, wants one car assorted liquor bottles and one car assorted drug-trade bottles.

Bridge Construction.—Bids will be opened October 21 at office of State Highway Commissioner, Capitol Building, Richmond, Va., for construction of reinforced concrete bridge over the Chickahominy river on road between Richmond and Ashland, Va., by Henrico and Hanover counties; plans and specifications on file at office of State Highway Commissioner; certified check, \$100; usual rights reserved; Charles W. Childrey, Richmond, Va., Commissioner for Henrico county; W. L. Lumkin, Hanover, Va., Commissioner for Hanover county.

Building Materials.—Purchasing agent of Crescent Engineering Co., Newport, Tenn., wants catalogues and prices on building materials.

Cast Iron.—See "Steel and Cast Iron."

Centering Machine.—Selma Iron Works, Selma, N. C., wants to buy centering machine, three and four-jaw chucks, to center bars up to seven inches.

Coffee.—Goeppinger Brokerage Co., Waco, Texas, wants two cars green coffee for roasting.

Concrete Mixer.—John L. Livers, 530 Woolworth Building, Lancaster, Pa., wants new or second-hand concrete mixer with capacity 10 to 20 cubic yards per hour; mounted or unmounted; without attached power.

Concrete Work.—Board of Affairs, Charles Loeb, president, and A. J. Humphreys, vice-president, Charleston, W. Va., will open bids October 29 for construction of concrete wall for sidewalk approach to east corner of Lovell-street bridge and for grading and filling same. Plans and specifications can be seen at office of W. A. Hogue, City Engineer, Smith Building.

Corrugated Sheets.—Goeppinger Brokerage Co., Waco, Texas, wants one car No. 28 galvanized corrugated sheets, standard lengths.

Cotton Machinery.—Samuel Gans Company, 635 Rayburn avenue, Memphis, Tenn., wants machinery for converting loose cotton, pickings, etc., into straight cotton.

Cotton Mill.—"New Textile Mill," care of the Manufacturers' Record, wants information as to details of \$100,000 cotton mill for manufacturing standard sheeting; invites data as to capacity in yards, number of operatives required, size and character of buildings, number of spindles and looms, cost of buildings, cost of machinery, etc.

Crane.—French Oil Mill Machinery Co., Lima, Ohio, invites estimates on overhead traveling crane.

Decorative Materials.—D. D. Audiclar, Bahooram Deals L. Bowbazar, Calcutta, India, wants to correspond with American manufacturers of enameled tiles, ceilings, wall hangings, glassware and general metallic and art wares for decorative purposes. Catalogues, prices and export terms invited.

Digging Bucket.—H. W. Page & Co., Central Building, 143 Liberty street, New York, N. Y., wants one-half or three-quarter-yard orange-peel bucket.

Drainage.—Clay County Houka Drainage Commissioners will award contract November 12 at courthouse in West Point, Miss., for cutting a canal 12 miles long through Houka creek bottom; to be 20 feet wide at top, 16 feet at bottom one-half distance; 25 feet at top, 20 feet at bottom the balance; all 5 feet deep; dirt to be thrown 10 feet clear of banks on each side and berm cleared of stumps; right of way cleared of timber 30 feet from center of ditch; 238,000 cubic yards of dirt to be excavated; usual rights reserved; bond \$3500. For further information address Ben H. McFarland, secretary, Aberdeen, Miss.

Driers and Screens.—W. J. Hardee, City Engineer, Room 19, City Hall, New Orleans, La., wants to correspond with manufacturers of rotary sand driers and of either rotary or jigger screens for separating sand and gravel; also of steel and iron bin gates for handling sand, gravel or crushed stone.

Drill Press.—Griffin & Kinley, Gastonia, N. C., in market for second-hand drill press, about 20-inch swing.

Drop Forgings.—Fireproof Supply Co., 1124 Candler Building, Atlanta, Ga., wants to correspond with manufacturers of drop forgings.

Electric Hoist.—See "Hoist."

Electric Lighting.—Board of Aldermen, Hendersonville, N. C., invites proposals for electric lighting; 30 or more 1200-candle-power lamps; successful bidder to have privilege of furnishing electricity for domestic and commercial use in city; Michael Schenck, Mayor.

Electric Motor.—Baltimore (Md.) Board of Awards, City Hall, will receive bids until October 30 for one 60-horse-power, shunt field

control, direct-current 440-volt motor, to be installed in new Female High School, Broadway and North avenue. Bids previously received to furnish this motor were rejected.

Electrical Conduits and Wiring.—See item under "Heating Apparatus."

Electrical Equipment.—Buffalo Hardware Co., Buffalo, Mo., wants small dynamo and electric plant.

Electrical Machinery.—H. W. Page & Co., Central Building, 143 Liberty street, New York, N. Y., want 50-kilowatt 110-volt direct-connected set.

Electrical Machinery.—Arbuckle Mining & Milling Co., E. S. Merkle, engineer in charge, Imboden, Ark., wants proposals for electric generators, transformers, transmission lines, etc., for 525-horse-power water-power electrical plant.

Electrical Supplies.—City of Claremont, I. T., will be in market for electrical supplies for transmission line from city to Verdigris river, five miles distant; W. P. Johnston, clerk.

Electric-light Plant.—N. M. Lawrence, Jr., N. B. Grantham and F. H. Brooks, committee, Smithfield, N. C., invite plans, specifications and estimates on construction of electric-light plant.

Elevator.—Trimble & Lutz Company, 1500 Market street, Wheeling, W. Va., is in market for 7x3 electric elevator, 3000 pounds capacity; automatic safety gates; overhead trolley system, with switches, all for one ton capacity; electric hoist of one ton capacity.

Enameled Glass.—P. H. Trout, Jr., Staunton, Va., wants addresses of manufacturers of and dealers in obscure enameled glass suitable for door lights.

Engine.—Arkansas Rice Land Development Co., Hazen, Ark., will want engine for irrigation machinery.

Engines.—Joseph H. Wallace, Temple Court Building, New York, N. Y., wants 125-horse-power engine; 110-pound-pressure horizontal non-condensing; wants also three small Jordan engines; all second-hand; delivered f. o. b. Roanoke Rapids, N. C.; estimates in duplicate.

Filter Plant.—City of Claremont, I. T., will be in market for water filter for municipal system; W. P. Johnston, clerk.

Flushing Tanks.—J. Q. Barker, alderman, Andrews, N. C., wants proposals for installation of flushing tanks for sewer system.

Galvanized Buckets, etc.—Goeppinger Brokerage Co., Waco, Texas, wants one car galvanized buckets, tubs and oilcans.

Gas Producer.—Burlington Junction Electric Light & Power Co., Burlington Junction, Mo., will need gas-producing plant for power for electric plant.

Gear Cutter.—Griffin & Kinley, Gastonia, N. C., in market for second-hand gear cutter.

Heating.—City of Greensboro, Ga., will open bids November 12 for installation of heating plant in school building to be erected; J. H. Ghesling, Mayor. (See item under "Schools.")

Heating Apparatus.—Bids will be opened at Treasury Department, office of James Knox Taylor, supervising architect, Washington, D. C., November 22, for erection (including heating apparatus, electric conduits and wiring, plumbing and gaspiping) of U. S. postoffice and custom-house at Portsmouth, Va. (See item under "Miscellaneous Structures," Portsmouth, Va.)

Heating Plant.—Board of Public Improvement, Andrew J. O'Reilly, president, and W. B. Dryden, secretary, will open bids October 21 for furnishing all materials, tools and labor necessary for installing low-pressure heating system in new Quarantine Hospital building in St. Louis county; deposit, \$310. Proposals must be made on blank forms furnished by president of Board; usual rights reserved. Specifications and forms of contract may be seen at office of president of board; certified check on some bank or trust company in St. Louis, payable to order of City Treasurer, for amount of deposit above named.

Hoist.—Trimble & Lutz Company, 1500 Market street, Wheeling, W. Va., is in market for electric hoist of one ton capacity.

Hydraulic Press.—Selma Iron Works, Selma, N. C., wants to buy hydraulic press, six-foot swing, 75-ton pressure.

Implement Manufacturers.—W. M. Crump, Fries, Va., wants to correspond with implement manufacturers relative to manufacture of new planting implement for cotton, peanuts, beans, etc.

Iron and Steel Gates.—See "Dryers and Screens."

Iron Castings.—Fireproof Supply Co., 1124 Candler Building, Atlanta, Ga., wants to

correspond with manufacturers of malleable-iron castings.

Iron Castings.—Georgia Agricultural Works, Fort Valley, Ga., wants malleable-iron castings; want from 500 to 750 pounds, one piece to weigh about seven pounds.

Iron Lathe.—Selma Iron Works, Selma, N. C., wants to buy second-hand pulley lathe for facing and boring; six-foot swing.

Ironworking Machinery.—See "Boiler-works Equipment."

Levee Work.—U. S. Engineer Office, Riegler Building, Little Rock, Ark. Sealed proposals for 248,000 cubic yards of levee work opposite Pine Bluff on Arkansas river, Arkansas, will be received at this office until November 16. Information furnished on application; Wm. D. Connor, captain, engineers.

Laundry Machinery.—H. M. Reinhardt, 3802 Park Heights avenue, Baltimore, Md., wants addresses of manufacturers of laundry machinery.

Lumber.—J. R. Ricker Company, Waco, Texas, wants quotations on 100,000 feet 6x8x8 yellow pine ties, 80 per cent. heart; 2375 cedar or chestnut telephone poles, 30s, 35s and 40s, six-inch top; also bridge timber, bolts and washers, piling, etc., delivered within 60 days, f. o. b. Texas common points.

Lumber.—El Paso Suburban Railway Co., 209 Mesa avenue, El Paso, Texas, in market for ties for two miles of railway; net cash price f. o. b. El Paso.

Machine Tools.—Purchasing agent of Crescent Engineering Co., Newport, Tenn., wants catalogues and prices on machine tools.

Machine Tools.—See "Boiler-works Equipment."

Machine Tools.—See "Drill Press" and "Gear Cutter."

Mantels and Grates.—Dr. J. D. Pfister, Creve Coeur, Mo., wants mantels and grates for parlor, dining-room, office, waiting-room, billiard-room and bedrooms.

Marble.—Peter Meeting, Anadarko, O. T., wants prices on marble base for \$15,000 business building.

Mattress Machinery.—Lawrence Grain & Produce Co., Checotah, I. T., wants addresses of manufacturers of and dealers in mattress machinery.

Mechanical Stoker.—E. W. Sample, 40 Chamberlain Building, Chattanooga, Tenn., wants catalogues and information relative to mechanical stoker.

Metal-working Machinery.—See "Optical Machinery."

Mill Supplies.—Twin City Boiler Works, 304 8th street, Bristol, Va.-Tenn., in market for 60 feet 2½-inch shafting, 10 hangers for 2½-inch shafting; one pulley, 48-inch diameter, 8-inch face, 2½-inch bore; second-hand will be considered.

Mining Plant.—Okmulgee Brick & Mining Co., S. J. Allen, general manager, Okmulgee, I. T., will be in market for supplies for mining plant.

Mop Machinery.—W. H. Zachry, 210 Spring street, Atlanta, Ga., wants machines for fastening yarn on end of handles; for mops.

Nails.—Goeppinger Brokerage Co., Waco, Texas, wants one car wire nails, assorted.

Oil-mill Machinery.—W. H. Stopple, 153-155 Camp street, Dallas, Texas, wants to correspond with manufacturers of oil-mill machinery for rendering peanut oil.

Optical Machinery.—Sajiro Tatelash, 48 Minamimachi, Takanawa, Shibaku, Tokyo, Japan, wants catalogues and prices on machinery for making eyeglass frames.

Paper-mill Machinery.—Joseph H. Wallace, Temple Court Building, New York, N. Y., wants two 800-pound beaters, one 1500-pound beater, two slushing machines, one grinder for 27x54 stone, one barker and one splitter; all second-hand; duplicate estimates; delivered f. o. b. Roanoke Rapids, N. C.

Paving.—J. H. Allen, Mayor, Bastrop, La., wants prices on paving 36 blocks four-foot cement sidewalks; one part cement, three parts sand.

Paving.—O. P. Jones, City Recorder, Tulsa, I. T., will open bids October 28 for paving about 40 blocks with asphalt upon concrete base, according to plans and specifications on file in office of T. C. Hughes, City Engineer; certified check, \$3000; usual rights reserved.

Paving.—Baltimore (Md.) Board of Awards, City Hall, will receive bids until October 30 to grade, curb, gutter and pave with vitrified brick, bitulith, asphalt blocks or sheet asphalt, 28th street between St. Paul and Calvert streets. Specifications and proposal sheets can be obtained from Commissioners for Opening Streets, James H. Smith, president, Hoen Building, Lexington and Holliday streets.

Peanut Butter Machinery.—W. H. Stopple, 153-155 Camp street, Dallas, Texas, wants to correspond with manufacturers of peanut butter machinery.

Pier.—Sealed proposals, endorsed "Proposals for Pier," will be received at the Bureau of Yards and Docks, Navy Department, Washington, until 11 o'clock A. M., November 16, 1907, and then and there publicly opened, for constructing a reinforced concrete wooden pile and timber deck pier at United States navy-yard, Charleston, S. C. Plans and specifications can be seen at the bureau or will be furnished by the commandant of the navy-yard named. R. C. Hollyday, Chief of Bureau.

Pipe Cutter.—Trimble & Lutz Company, 1500 Market street, Wheeling, W. Va., wants pipe-cutting machine.

Piping.—See item under "Heating Apparatus."

Piping.—City of Claremont, I. T., will be in market for eight-inch cast-iron water-pipe; W. P. Johnston, clerk.

Piping.—Goeppinger Brokerage Co., Waco, Texas, wants 50,000 feet three-inch black pipe and 42,000 feet two-inch black pipe.

Piping.—Del Rio Mining Co., 79 Milk street, Boston, Mass., wants prices on three, four, five and six-inch pipe; engineer and general manager, John N. Adams, Del Rio, Tenn.

Planing Machinery.—Purchasing agent of Crescent Engineering Co., Newport, Tenn., wants catalogs and prices on planing-mill machinery.

Plumbing.—See item under "Heating Apparatus."

Plumbing.—See "Heating."

Plumbing, etc.—Treasury Department, office of supervising architect, Washington, D. C.—Sealed proposals will be received until November 11 for plumbing and sewerage at Santa Rosa Quarantine Station, Pensacola, Fla., in accordance with specifications, copies of which may be had at this office or at office of custodian of station, Pensacola, at discretion of supervising architect. James Knox Taylor, supervising architect.

Power Plant.—See "Water-power Equipment."

Power Shears.—Selma Iron Works, Selma, N. C., wants to buy hand-power shears continued for cutting and splitting iron up to three-eighths inch.

Printing Machinery.—Ashcraft Cotton Mills, Florence, Ala., wants machinery for bag printing.

Pump.—Arkansas Rice Development Co., Hazen, Ark., will want pump for irrigating purposes.

Pump.—Water and Sewer Commissioner D. F. Sullivan, Dallas, Texas, will be in market for 10,000-gallon high-service pump.

Pumps.—Del Rio Mining Co., 79 Milk street, Boston, Mass., wants prices on second-hand steam pumps; engineer and general manager, John N. Adams, Del Rio, Tenn.

Pumps.—Joseph H. Wallace, Temple Court Building, New York, N. Y., wants prices (duplicate estimates) on two 6x14 duplex or two 6x10 triplex pumps, one 7x16 duplex or one 8x10 triplex pump, one 5-inch centrifugal pump, one 4-inch centrifugal pump; second-hand; delivered f. o. b. Roanoke Rapids, N. C.

Railroad Supplies.—Augusta Arsenal, Georgia.—Sealed proposals will be opened November 1 for rails, switches, ties, trolley wire and poles for 1600 feet spur track. For proposal blanks and information address The Commanding Officer.

Rails, etc.—Goeppinger Brokerage Co., Waco, Texas, wants 35 miles of 35-pound relay steel, spikes included; also 90 miles 60-pound relay steel, spikes included.

Rails and Ties.—El Paso Suburban Railway Co., 209 Mesa avenue, El Paso, Texas, in market for two miles of 30, 35, 40 or 45-pound relays, complete with fastenings, etc.; also ties for two miles of road; quote net cash price f. o. b. El Paso.

Railway Construction Supplies.—J. R. Ricker Company, Waco, Texas, wants quotations on 4500 tons relay steel, 60 pounds; 4000 tons relay steel, 56 pounds; 1320 kegs 5½x9-16 railroad spikes, 15,840 angle bars, 302 kegs ¾x3½ square nuts, 16 No. 7 frogs, with points, switchstands and bridges for same, delivered within 60 days, f. o. b. Texas, common points.

Railway Equipment and Rails.—J. R. Cohn, Box 503, Fort Worth, Texas, in market for dinkey locomotive (saddle-tank preferred), from 12 to 15 tons weight; 5 to 35 one-way dump cars of four-yard capacity; equipment to be narrow-gauge, in condition for operation; wants also one and one-quarter miles 30 or 35-pound new and relaying rails; Mobile, Ala., delivery.

Retaining Wall.—C. E. Leonard, City En-

gineer, Austin, Texas, will receive bids to November 21 for retaining wall and abutment to be erected at estimated cost of \$8000; concrete; 1324 cubic yards.

Road Improvements.—Cabarrus County Commissioners, John A. Cline, chairman, Concord, N. C., will open bids October 24 for grading and macadamizing about 10 miles of public road from Concord to Kannapolis, N. C., and about one mile on the Concord and Charlotte road. Plans and specifications on file in office of Quint E. Smith, civil engineer, Concord, N. C.

Roofing.—Okmulgee Brick & Mining Co., S. J. Allen, general manager, Okmulgee, I. T., will be in market for supplies for mining plant.

Retaining Wall.—Bids will be opened at office of City Clerk, Austin, Texas, October 21 for construction of concrete retaining wall, to cost about \$8000. Plans and specifications may be obtained from C. E. Leonard, City Engineer; certified check covering 10 per cent. of bid; usual rights reserved; A. C. Goethe, chairman street-paving committee.

Road Improvements.—County Commissioners of Caroline county, Maryland, will open bids November 12 for improving public highways between Denton and Three Bridges, known as Denton-Three Bridges road. Proposals must be made on blank forms furnished by State Geological Survey Commission, to be obtained through its office in Baltimore, Md. Work includes grading and macadamizing of about one mile of road according to plans and specifications on file at office of County Commissioners; certified check, \$300, payable to County Commissioners of Caroline county; usual rights reserved; I. L. Dukes, clerk.

Sash Devices.—Trimble & Lutz Company, 1500 Market street, Wheeling, W. Va., is in market for pivot sash-operating device.

Sawmill.—W. H. Stopple, 153-155 Camp street, Dallas, Texas, will be in market for hardwood sawmill with capacity of 10,000 feet daily.

Saws.—J. A. H. Bell, Box 230, Spartanburg, S. C., wants saw to cut down and cut up trees.

Sewer System.—N. M. Lawrence, Jr., N. B. Grantham and F. H. Brooks, committee, Smithfield, N. C., invite plans, specifications and estimates on construction of sewer system.

Sewerage.—Town of Blackstone, Va., wants bids on installation of sewerage system. Address H. H. Seay, chairman Water and Sewerage Commission.

Shingle Mill.—L. L. Prime, Deer Park, Ala., wants second-hand shingle mill.

Skewer Lathes.—Southern Hardwood Manufacturing Co., Box 122, Savannah, Ga., wants to correspond with manufacturers of lathes for making meat skewers.

Smoke Consumers.—E. W. Sample, 40 Chamberlain Building, Chattanooga, Tenn., wants catalogues and information relative to smoke consumers.

Stave Machinery.—E. E. Menees, Quitman, Ark., wants prices on machinery for making staves; also wants full information regarding stave mill, quantity procurable from cord of bolts, etc.

Steel and Cast-Iron.—Halsema-Woodcock Construction Co., Jacksonville, Fla., wants steel and cast-iron for \$40,000 warehouse.

Steel Doors.—Halsema-Woodcock Construction Co., Jacksonville, Fla., wants rolling steel doors.

Steel Plates.—Fireproof Supply Co., 1124 Candler Building, Atlanta, Ga., wants to correspond with manufacturers of steel plates cut and punched to shape.

Stovepipe.—Goeppinger Brokerage Co., Waco, Texas, wants one car assorted No. 1 and No. 2 stovepipe.

Street Improvements.—Board of Public Works, H. F. Van Duzen, chairman, Chattanooga, Tenn., will open bids October 29 for construction of chert roadways on Cherry and 1st streets; blank forms for proposal and specifications furnished on application to clerk of Board; certified check, \$100, payable to T. J. Gillespie, City Treasurer; usual rights reserved.

Textile Machinery.—A. R. Sherrill, Statesville, N. C., wants information as to manufacture of or reworking old jute bagging and manufacturing burlaps; estimates on cost of machinery required, where raw material is obtainable, and other particulars.

Theater Scenery.—Opera House Co., Lehigh, N. C., wants stage scenery.

Ticking.—Goeppinger Brokerage Co., Waco, Texas, wants one car bedticking, assorted colors, in bales.

Tile.—Peter Meeting, Anadarko, O. T., wants prices on tile flooring for \$15,000 business building.

Tinware.—W. A. Grimes, R. F. D. No. 1, Sparta, Ga., wants addresses of manufacturers of tinware.

Tracklaying Cars, etc.—Bids will be opened at office of H. F. Hodges, General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., November 12 for tracklaying cars, journal jacks, motor, drain tile, iron, steel, rivets, chain, pulleys, cylinder, engine, etc. General information relating to Circular No. 338 obtained from above office or offices of assistant purchasing agents, 24 State street, New York; Custom-house, New Orleans; 1086 North Point street, San Francisco, Cal., and 419 Chamber of Commerce Building, Tacoma, Wash.; also from Chief Quartermaster, Chicago; Depot Quartermaster, St. Louis; Depot Quartermaster, Jeffersonville, Ind., and Chief Quartermaster, Atlanta, Ga., and at U. S. Engineer office in following cities: Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit and Milwaukee.

Trolley System.—Trimble & Lutz Company, 1500 Market street, Wheeling, W. Va., is in market for overhead trolley system, with switches, for one ton capacity.

Water-power Equipment.—Purchasing agent of Crescent Engineering Co., Newport, Tenn., wants catalogues and prices on water-power machinery.

Water-works.—N. M. Lawrence, Jr., N. B. Grantham and F. H. Brooks, committee, Smithfield, N. C., invite plans, specifications and estimates on construction of water-works.

Water-works.—Contractors are invited to submit bids for concrete reservoir, to hold 250,000 gallons of water and for laying one and one-half miles of water-pipes in Blackstone, Va. For specifications apply to H. H. Seay, chairman of committee.

Well-drilling.—Midland Oil Co., Oklahoma City, O. T., wants to engage experienced well-driller with outfit.

Wood Handles.—Fireproof Supply Co., 1124 Candler Building, Atlanta, Ga., wants to correspond with manufacturers of wood handles.

Woodworking Machinery.—See "Shingle Mill."

Woodworking Machinery.—See "Planing Machinery."

Woodworking Machinery.—C. A. Lucas, Valdosta, Ga., wants advices regarding equipping of handle, spoke, trunk or other woodworking factory, estimates on machinery required and other data.

Woodworking Machinery.—See "Skewer Lathes."

Wrench Manufacturers.—Rasnick Wrench Corporation, Clintwood, Va., wants to correspond with manufacturers relative to receiving bids for manufacturing wrench.

INDUSTRIAL NEWS OF INTEREST

Building An Addition.

The French Oil Mill Machinery Co., Piqua, Ohio, is building an addition to its present shops and expects to install an overhead traveling crane. Estimates on the crane are invited.

Chas. H. Birmingham, Brass Founder

Among the numerous metal-working industries of Baltimore, Md., is the plant of Chas. H. Birmingham, at 231 South Exeter street. He offers to purchasers prompt deliveries on brass, bronze, copper and gun-metal castings, ingot metals, alloy copper, etc. Recently Mr. Birmingham purchased six acres of land on the Washington road in the suburbs of Baltimore, at the junction of the Baltimore & Ohio and Pennsylvania Rail-

roads, and intends utilizing the property as site for another plant in order to properly care for his rapidly-increasing trade.

Shipping Lima Locomotives.

The Lima Locomotive & Machine Co., Lima, Ohio, has recently shipped a 150-ton locomotive of the Shay geared type to the Southern Railway and another to the Norfolk & Western. Last week a similar machine was sent by the company to the Manufacturers' Railway, St. Louis.

H. Kander Handles Scrap Metals.

There is quite an industry because of the handling of scrap metal, rubber and other products. Many individuals and companies make a specialty of such handling. Among

those actively engaged in this is H. Kander of Bowling Green, Ohio, who invites buyers and sellers to investigate his facilities.

Monarch Fire-Door Fixtures.

Last week the Manufacturers' Record presented an illustrated description of the Monarch fire-door fixtures manufactured by the Richards Manufacturing Co. of Aurora, Ill. Besides giving the previous details it should have been stated that the Monarch fixtures are approved by the National Board of Underwriters. This is an important point for the consideration of dealers in and users of fire-door fixtures.

Engineers for Big Irrigation Plant.

The progress of irrigation in different parts of the country continues, and one of the projects at present being arranged for in the West includes that of the North Platte & Encampment Canal Co. This company has engaged Messrs. Charles Hansel & Co. of 43 Wall street, New York, to prepare surveys, plans and estimates and to take charge of the construction of a canal to irrigate 93,000 acres of land extending from Saratoga, Wyo., south to the Colorado State line. This work will involve the building of a canal with a capacity of 1000 second feet, and it will carry with the development a hydro-electric plant of considerable magnitude.

J. R. Alsing Engineering Co.

An announcement that should have the attention of all who are interested in crushing, grinding, drying and pulverizing machinery is that the J. R. Alsing Company of New York, founded in 1869 and organized under New York laws in 1885, has changed its name to the J. R. Alsing Engineering Co. and increased capital stock from \$20,000 to \$100,000. The officers will be the same as in the old company, and the designing and manufacture of the class of machinery above mentioned will be continued. This increase in capital was demanded by the great increase in the company's trade. Offices are at 136 Liberty street, New York city. Mr. R. F. Abbe is president.

Joseph Bros. Wadding Output.

The Joseph Joseph & Bros. Company, 1234-1248 Harrison avenue, Cincinnati, Ohio, which controls and operates the Railway Supply & Manufacturing Co., entered into the manufacture of wadding about a year and a half ago. It states that since then "the price of this commodity has dropped about 50 per cent., largely through our instrumentality in permitting a superior grade of this material to be marketed at a favorable figure." In further extension of the company's wadding trade plans and specifications are being prepared for bleachery to be erected at a cost of \$75,000 to \$100,000. It is expected that building operations will begin before January 1.

Foos Manufacturing Co. Contracts.

During the past year the Foos Manufacturing Co. of Springfield, Ohio, has filled many contracts for its designs of mill machinery and reports that the demand has continued considerably beyond the ordinary season. Recently a large corporation contracted with the company for the installation (in eight mills) of Foos hulling and separating machinery costing about \$15,000. Earlier in the season another large company ordered from the Foos plant machinery for some 14 mills in Alabama and Mississippi, the contract amounting to probably \$23,000. Two years ago this same company had ordered Foos machinery for mills in two States, and last year installed similar equipments in its mills in the South.

Southwestern Bridge Co.

The Southwestern Bridge Co. of Joplin, Mo., has established contracting offices at 906 Wilson Building, Dallas, Texas. J. I. Boggs, contracting engineer; 317 Culbertson Building, Oklahoma City, O. T. R. X. Basford, contracting engineer; 728 Symes Building, Denver, Col. George A. Sears, contracting engineer. Some of the company's recent contracts are as follows: Waco, Texas, Texas Central Railroad, for two through-plate girder bridges; Shreveport, La., steel work in Allen Building; Springfield, Mo., 100,000-gallon tank and tower for St. Louis and San Francisco Railroad; Independence, Kan., Kansas Natural Gas Co., four additional steel buildings, and bridges required on Joplin & Pittsburg Interurban Railroad.

The Roanoke Iron Works.

A manufacturing enterprise of importance to the city in which it is located and the territory which it will cater to is the Roanoke Iron Works of Roanoke, Va. This company was formed last week by the merger of the Rockhill Foundry & Machine Co., Inc., and the Roanoke Foundry & Machine Co.,

Inc., the new organization having a capital stock of \$100,000. It will operate a modern and fully-equipped machine shop, foundry and pattern shop, and will be aggressive in seeking new contracts for the manufacture of that class of products to which its equipment is adapted. The new corporation's officers are: President, H. E. Obenshain; secretary-treasurer, C. A. Moomaw, and general manager, H. B. Rockhill. Those named and Messrs. R. H. Angell, R. W. Kime, C. D. Denit and James E. Goens are the directors.

Pilling Air Engine Co. Announcement

An announcement of interest in industrial circles and to present and prospective users of Pilling Air Engine Co. products is made by that company. The company will change its name to the Detroit Holst & Machine Co., a new corporation capitalized at \$50,000, and will continue manufacturing pneumatic hoists, locomotive turntables and compressed-air-hoisting machinery. This new company has completed a new plant and has purchased three acres of land in order to provide for further facilities at Milwaukee Junction, on the Grand Trunk Railroad adjacent to Detroit. The Pilling corporation will be retained with a nominal capital in order to protect the title and good-will. Both companies will be controlled by the same management. Offices are at North Grand boulevard and Riopelle streets, Detroit, Mich.

Birmingham's New Car Works.

Manufacturing and mining operators in the Birmingham district now have another modern plant from which logging cars, car wheels, mining cars and other similar product can be purchased. This is the plant of the Birmingham Car & Manufacturing Co., which was incorporated some time ago with a capital stock of \$100,000 and has offices in the Brown-Marx Building, Birmingham, Ala. The works comprise an 80x185-foot foundry, 65x250-foot machine shop, 45x70-foot powerhouse, pattern shop, etc. The buildings are of brick and steel, and the various machines are driven by electric motors, while compressed air is utilized for handling castings and moldings. Daily output is 10 complete logging cars, 100 standard-size wheels, 180 small wheels, etc. Officers of company: President, C. E. Foust; secretary-treasurer, T. A. Burbridge.

International Independent Telephone Association.

The annual convention of the International Independent Telephone Association will be held at the Coliseum, Chicago, on January 21, 22 and 23, 1908. This date is during the period of the Third Annual Electric Show, and in connection with the exhibit of other electrical products the independent telephone manufacturers have arranged to make a large combined exhibit of telephone instruments and apparatus. This will occupy the entire annex, containing over 10,000 square feet floor area. It is understood that this will be the largest and most complete exhibit of telephones and telephone devices ever held at any one time. Further information on this subject can be obtained by addressing Homer E. Nlesz, manager of the Electrical Trades Exposition Co., 1006 Monadnock Block, Chicago, Ill.

To Exhibit at Philadelphia Bourse.

The Philadelphia Bourse of Philadelphia, Pa., reports new applications for space. The Hohman & Maurer Manufacturing Co., Rochester, N. Y., will show a full line of barometers and thermometers of all kinds and for all purposes, indicating the lowest to the highest temperatures, pressure and temperature regulators and scientific instruments for the laboratory and chemist. This company has installed a complete plant where steam and hot-water will be used for the purpose of making demonstration of its system of temperature regulating. Mr. Olaf Saugstad is the manager for Philadelphia and adjacent territory. The Wm. M. Howard Co. of Philadelphia, Pa., has taken space to display the E. A. Blanton, Jr., lock nut. This company makes these nuts for all purposes and all sizes, from half inch up. We understand the nut is largely used on automobiles and machinery where there is much vibration. The Flexible Compound Co. of Philadelphia has engaged space for displaying its specialty, and is giving practical demonstrations.

Substitute for Antiquated Fire Pails.

There are many frailties of human nature, and one seems to be the neglect to keep fire pails properly filled. You can go through many large manufacturing plants, warehouses or large retail stores, where there is a risk of life as well as property, and see open fire pails half filled with foul water, perhaps entirely empty, or frozen solid.

The "Safety" fire-bucket tank is offered as vastly superior to fire pails and casks, as the galvanized-steel tanks contain 25 to 40 gallons of chemical solution, into which six buckets, with self-raising handles, are submerged, and as fast as one bucket is removed the next fills and handle rises automatically. The solution contains no acid and is harmless, the chemical keeps the water sweet, a rubber packing prevents evaporation, and it will not freeze at 25 degrees below zero. Among the September sales of the "Safety" fire-bucket tanks was equipment for the New Plaza Hotel, New York city; Greenhut & Co., dry-goods store, New York city; Mercantile Exchange; Price & Rosenbaum, dry goods, Brooklyn, N. Y.; McClure's Magazine, New York; P. F. Collier & Son, New York; American Brake Co., St. Louis; Lehigh Portland Cement Co., Mitchell, Ind., and many others. An interesting booklet entitled "Better Fire Protection" can be obtained from the Safety Fire Extinguisher Co., 29 West 42d street, New York. This company manufactures the "Safety" specialty referred to.

Turbines and Generators in Textile Industry.

Among the noteworthy features of the textile industry this fall has been the ordering of steam turbines of the improved type built by the Allis-Chalmers Company of Milwaukee, Wis., for installation in some of the largest mills of New England and the Central and Southern States. Power machinery of that company's build has long been prominent throughout the country in manufacturing plants of every description, and in the electrification of textile mills Allis-Chalmers steam turbines and generators, as well as its "induction" motors for alternating current, are now playing a leading part. Contracts recently awarded by textile manufacturers include three turbines for the new 10,000-horse-power plant of the Pacific Mills, Lawrence, Mass.; one of 2200 horse-power for the American Thread Co.'s Watuppa Mills, one of 3000 horse-power for the Tremont-Suffolk Mills, and machines of 800 horse-power each for the Jamestown Worsted Mills and Cherry Cotton Mills. These turbines are of the same general type as the machines installed on the record-breaking liners Lusitania and Mauritania.

Contracts of A. C. Stansill.

Among recent contracts secured by A. C. Stansill, Roanoke, Va., were the following for machinery: Vulcan steam shovel, Byers hoisting engine, McKiernan rock drill and Blakeslee pumps for H. J. Siebel, iron mines, Front Royal, Va.; complete rock-crushing plant, including Indiana crusher, McKiernan rock drill, James Leffel boiler and engine, Smith concrete mixer and 20 Kilbourne & Jacobs four-yard two-way dump cars, for Norfolk & Western Railway; complete machine-shop equipment, including Hamilton Machine Tool Co.'s lathe, planer, shaper and drill press, for Virginia Brewing Co., Roanoke, Va.; several installations of McKiernan rock drills for contractors on Norfolk & Western and Tidewater railroads; full line of Columbus Pneumatic Tool Co.'s riveting hammers and drills for Virginia Brewing Co., Roanoke, Va., and Enterprise Foundry & Machine Co., Bristol, Va.-Tenn.; many Pittsburg vises for railroad and machine shops and manufacturing plants in Virginia and Tennessee, and Atlas boilers for Episcopal Institute at Chatham, Va. Mr. Stansill is also bidding on a number of heavy equipment contracts with the railroad companies and railroad contractors, having recently placed before the Southern trade a new 22-yard steel car designed for heavy construction work.

The Steam Turbine in Practice.

The rapidity with which the steam turbine has come into popular favor is one of the phenomena of modern steam engineering. It is less than a decade ago since the first turbine was sold in the American market, but there are today about 700 in use throughout the country, aggregating a total capacity of approximately 1,000,000 kilowatts, or about 1,500,000 horse-power. This wonderful demand for that novel prime mover is, of course, easily explained by the many advantages of the turbine. An interesting test was conducted recently by the engineers of the New York Edison Co. at the Waterside Station, near 30th street, which developed facts hitherto unattained by any steam prime mover in this country. The unit under test was a Westinghouse turbine of 10,000-horse-power capacity. It had been sold under a steam-consumption guarantee of 15.9 pounds of steam per kilowatt hour, but the test recorded the phenomenally low steam consumption of a shade less than 14.9 pounds per kilowatt hour. Apart from the fact that this result gained a bonus for the Westing-

house turbine of over \$35,000, it is of interest to all users of steam engines as an illustration of what is said to be the lowest record for steam consumption which has ever been recorded by a stationary steam engine. This steam consumption figures less than one and one-half pounds of coal per kilowatt hour and graphically illustrates the great advance in modern power plant practice attained through the introduction of the steam turbine.

TRADE LITERATURE.

Monarch Fire-Door Fixtures.

Included in the list of fire-door hardware inspected and approved by the Underwriters' Laboratories (Inc.), under the supervision of the National Board of Fire Underwriters, are the products of the Richards Manufacturing Co. of Aurora, Ill. This company is distributing a circular illustrating and describing in detail the Monarch fire-door fixtures and trimmings, and has recently issued a new 120-page catalogue relative to its house, barn, warehouse and fire-door hangers and other hardware specialties.

Slip-Drum Electric Winches.

A recent publication of the Lidgerwood Manufacturing Co. is Bulletin No. 21, which presents an illustrated description of the slip-drum electric winch for hauling in car floats. This device hauls by power, gives one man entire control, exerts full power without danger to the hauler, absolutely controls float if mooring gear parts and prevents loss of cars or trucks. The winding drums slip when float is in or proper strain is exceeded. If interested in equipments of this character address the company for a copy. Offices at 96 Liberty street, New York.

Of Interest to Labor.

Of timely interest to labor looking for advantageous homes where employment can be secured readily is an illustrated booklet recently issued by the Lynchburg Cotton Mill Co. of Lynchburg, Va. This publication presents views in colors of the company's plant, mill town and surroundings, besides giving data of value as to the manufacturing activity of Lynchburg's various industries, especially the company's cotton factory. It is stated that more workers are needed in the city's industrial life, and investigation is invited of the opportunities available. A copy of the booklet will be sent to any applicant.

Ahead of the Times.

A circular letter which the American Blower Co. is mailing to people who are likely to be in the market for any of the apparatus that company manufactures says: "Because we keep a little ahead of the times in all that pertains to the manufacture and installation of heating, ventilating, drying, mechanical draft and blast apparatus, our output maintains a pre-eminent position, whether viewed from the standpoint of design, material or workmanship. If you care to familiarize yourself more fully with our various lines of manufacture we shall be glad to send you any or all of our catalogues." Address the main office, at Detroit, Mich.

Information About Metal Shingles.

People who are acquainted with the progress of the building industry are aware that metal shingles and similar articles used in roofing are being largely specified nowadays. Some of the costly residences erected in the South recently have metal-shingle roofs, and many other structures in that section and other parts of the country are so erected. In order that timely information may be steadily presented regarding such roofing the Cortright Metal Roofing Co. of 50 North 23d street, Philadelphia, Pa., issues a bulletin, mention of which is made in this column from time to time. The autumn number is now being mailed. Those architects, building contractors and building owners not on the lists are invited to send name and address.

A Hard-Hitting Helve Hammer.

Managers of shops and other industries or enterprises where helve hammers are needed should not fail to investigate the superiorities claimed for the Hathorn hard-hitting helve hammer. This tool is built to give real service, and mechanical experts have been surprised at its extreme strength and large capacity for work. A full description is presented in a leaflet issued by the Parker Holst & Machine Co., 971 North Francisco avenue, Chicago, Ill. This company builds the hammer, also cranes, trolleys, hoisting engines, derricks, material elevators, gasoline engines, winches, blocks and trucks. A brief description of the gasoline engine, ac-

compacted by an illustration, is presented in the hammer leaflet.

A Flexible Waterproof Binder.

A flexible compound offered by its manufacturer, the Flexible Compound Co., is doubtless to have extensive use. It is offered for waterproofing metals, canvas, leather, paper, fabrics, cement, stone, terra-cotta, electrical work and various other products. Because of these uses active in varying classes of industrial activity will be sufficiently interested to investigate this product. The compound is manufactured by the Flexible Compound Co. at its plant in Philadelphia, Pa., and George W. Simpson, sales agent, has an exhibit in the basement of the Bourse Building, Philadelphia, where investigation is invited. An interesting leaflet is now being distributed to tell about the factors which will make this compound in large demand. Write for one.

P. B. Miles Concrete Products Machinery.

A publication of interest to all who want to be informed regarding improved machinery for manufacturing concrete building and construction products is issued by the P. B. Miles Manufacturing Co. of Jackson, Mich. It tells readers how to make true concrete stone in various shapes, sizes and designs; how to select the machinery to be used in making such products; presents photographic views of buildings erected with P. B. Miles concrete products; gives data of general interest and value to users of concrete-products machinery, and other information. Managers of concrete plants now in operation or prospective buyers of mechanical equipments for such establishments will find it of advantage to their interests to examine the P. B. Miles publication. The company will send one to any inquirer.

Superior Work in Engraving.

Superior work in the engraving line is exhibited in a leaflet which the Baltimore-Maryland Engraving Co. has issued to present a sample of the class of photographic reproduction with colors it can produce at its plant. The picture shows a beautiful sylvan view in Baltimore's famous Druid Hill Park, and referring to the specimen the company says: "Color work like this specimen can be made from any photograph. The colors generally are yellow, red, blue and black, printed in the order mentioned. Any printer can handle this work successfully, as three of the plates are stipple zinc cuts, while the fourth plate is a half-tone and only requires the usual care demanded for such work. We always furnish progressive proofs, showing exact shade of each color and order in which it should be printed. Send us a photograph and order a trial set; the plates are not expensive." The company's offices are at 28 South Charles street, Baltimore, Md.

Iron, Steel, Coal and Coke Directory.

A publication that is of value to all who are interested in the iron, steel, coal and coke industries is published by Messrs. R. L. Polk & Co., 307 Market street, Pittsburgh, Pa. It comprises an authentic and concise list of firms, corporations and individuals engaged in the production of iron, steel, coal and coke in the United States, Canada and Mexico, including brief descriptions of the mines or plants operated, their location, equipment, capacity, names and addresses of officers and others interested in the enterprises, and other data. All information presented has been gathered from original sources and has been carefully compiled. The names and works of the various consolidated companies are given in such a manner that the cross references will indicate where to find the details regarding same. In the arrangement of the volume the aim has been to have all data in convenient form for ready reference, giving all important details and omitting unnecessary phraseology. This has been admirably accomplished. An inquiry to Messrs. Polk & Co. will bring further information regarding the book and sample pages.

For Railway Supply Purchasers.

Purchasers of supplies for railways should have for perusal the little leaflet issued by the Maryland Railway Supply Co. This company, in the leaflet, tells of its facilities for furnishing railway supplies for track maintenance, especially its spike strut rail fastener, a patented device which is designed to reinforce track spikes wherever greater resistance is required. The strut is headed up like an ordinary standard spike, but is made larger in the shank. The point is beveled on one side with a chisel end, so make it take proper angle when driving. The head is slotted on an angle of about 30 degrees to eleven-sixteenths of an inch in width, sufficient to hold any standard track spike. The

spike strut braces the rail at point of greatest pressure. It holds track absolutely to gauge. On account of being impossible to loosen, there is a lateral stiffness which holds the rail so firmly on the tie that water and sand are prevented from entering, thus eliminating friction. It performs the same function of the tie plate or rail brace, with the additional advantage of preventing cutting the throat of track spike. The Maryland Railway Supply Co.'s offices are at 510 Continental Building, Baltimore, Md. Chas. Elliott is sales manager.

Oswego-McNaull Boilers.

When nearly 200,000 horse-power of a certain type of boiler is in use, then surely that type demands the consideration of boiler users. This is said of the Oswego-McNaull water-tube boilers, which are designed upon correct principles with straight tubes, longitudinal drums and steel headers, embodying the good features of the best-known sectional boilers and the rigid-header type. An illustrated pamphlet now being distributed presents full particulars regarding these boilers, explaining in detail their construction and the results they accomplish in power-plant practice. The company manufacturing them has one of the most complete plants of its kind in the East, and for years has been favorably known for its boilers. Besides boilers, the product includes standpipes, steel tanks, carburetors, vulcanizers, digestors, stacks and all special ironwork. The construction details are not only well described, but are accompanied by photographic views in the pamphlet referred to. Managers of power plants or of manufacturing plants of any class where power is generated by steam will find information of value in the Oswego-McNaull publication. For a copy address the Oswego Boiler & Engine Co. of Oswego, N. Y.

The Modern Wood Preservative.

Those who are interested in the preservation of wood that is submerged, exposed to climatic influences or to deleterious effects of acids, fumes, etc., should read a pamphlet now being distributed. This publication gives timely data regarding the ways and means of lengthening the life of wood used in any place. It tells of a paint that is offered as an absolute protection against the attacks of the teredo and limboria, and for the treatment of dredges, lighters, pontoons, piling, dock timbers, ties, poles, cross-arms, shingles, etc. The paint is widely known as Kennon's teredo-proof paint, and is a secret process, chemical compound, the basic property of which is dead oil of coal tar, and in addition contains germicides that penetrate the wood in a marked degree. These germicides are permanent constituents of the paint and will not be affected by the chemical action of salt water. The paint possesses a heavy and flexible pigment, which cannot penetrate into the pores of the wood and which presents an insoluble and indestructible outer surface, thereby protecting the germicidal qualities that have entered the wood. The Teredo-Proof Paint Co., Whitehall Building, 17 Battery place, New York, is the manufacturer, and is sending the pamphlet mentioned to applicants who are interested in the subject of wood preservatives.

The "Universal" Pipe and Fittings.

Few are ignorant of the great demand for pipe and its accompanying fittings in the industrial activity and progress of today. Throughout the entire world pipe is called for in increasing quantities and of constant or improving quality for gas mains, water mains, compressed air, refrigeration, sprinklers, hot water, steam, plumbing, sewerage and numerous other purposes. One brand of pipe and fittings that is extensively known in the above-named demand is the "Universal" pipe and fittings manufactured by the Central Foundry Co. of 116 Nassau street, New York. This company has numerous factories in different sections of the United States, and for five years its brand has been consumed in large quantities, necessitating increases in productive capacity from time to time. That its quality is all that can be desired is therefore indicated. A complete illustrated catalogue of the "Universal" offerings is now being distributed and gives, among other important data, the statement that during the year the company is to add 16-inch pipe and fittings to previous sizes. Twelve and 14-inch pipe is included in the new catalogue. Another interesting publication of the Central Foundry Co. is "The Leaky-Joint Problem and How Solved." This contains valuable statistics on leakage of water and gas mains and reproduces a few commendatory letters received by the company, together with photographs of "Universal" pipe under working conditions.

Vilter Horizontal Corliss Engines.

Engineers, managers of power and manufacturing plants and others interested in steam-power engines will find data for their consideration in Catalogue E, giving particulars of the Vilter Corliss engines. These improved horizontal Corliss engines are built high-pressure and condensing, simple and compound. They were designed after a close study of all the mechanical details entering into the construction of engines, which, with the builder's experience of many years as engine builder, has produced a machine offered as equal to any other of its class. A general view of the Vilter plant is presented, as well as interior views of the various departments, and the engine and its different parts are fully described, this description being accompanied by photographic views to elucidate the data. The Vilter Manufacturing Co. of Milwaukee, Wis., builder of these engines, says: "The large list of users shown herein, together with the fact that a great many of our customers have purchased two, three, four and five of our engines, at different times, bears witness to the excellent quality of our work. We have built and equipped an up-to-date foundry to enable us to make the proper kind of iron for the requisite parts of the engine. In connection with our foundry we have a chemical laboratory, which is in charge of an expert foundry chemist. Test bars are made of the different heats, and a record is kept of the analysis of all the important castings of the engine. The modern tools and facilities with which our shops are equipped, and the extensions we have been adding to our plant from year to year, enable us to make short-time delivery of our products. We solicit correspondence and will be pleased to quote prices upon application."

PUSHING INTO COAL.

Three States Interested in Railroad Construction.

[Special Cor. Manufacturers' Record.]
Middlesboro, Ky., October 21.

Railroad construction in the tri-State region, while retarded to some extent by the stringency of the money market, has been pursued with little interruption in several directions during the summer, and marked progress has been made in opening new coal fields. Activity has been especially marked in the Black Mountain country of Southwestern Virginia, in the Knox-Bell-Whitley coal fields of Southeastern Kentucky, and in Campbell and Claiborne counties, in Northeastern Tennessee. Many miles of railroad have been built in these regions during the past year, and coal and timber lands thereby greatly enhanced in value. In some instances coal developments proceeded ahead of railroad construction, and several plants were almost in working order by the time the railroad branches were put into operation.

November 1 has been set for the opening for traffic of the North Fork branch of the Black Mountain Railway, which runs from Appalachia, Va., through the "Pocket" coal fields in Lee county. This line is to be a feeder to the Southern system. The coal operators of the "Pocket" district are furnished a southern and eastern outlet via the new extension, and movements of coal will be greatly facilitated. The Black Mountain Railway, which has been in operation for some time in the Southwestern Virginia coal district, extends through a vast coal territory, which is furnishing a large initial tonnage. Some big operations have been started during the summer, among them being the plants of two local concerns, the Dominion Coal Co. and the Lee Coal Co.

On the Kentucky side two important railroad branches have been built by the Louisville & Nashville Company, one entering the Clear Creek coal fields of Bell county and the other extending up the Straight Creek valley, in the same county. The Louisville & Nashville Company is also expending a vast sum in bettering its facilities along the Cumberland Valley division, which taps the Southeastern Kentucky coal fields. Storage yards are

planned between Four-Mile and Wallsend, around which a number of big plants are in operation. Numerous sidings are being constructed at intervals along the Cumberland Valley division.

Construction work has ceased on the Cumberland Railroad, but much has been accomplished toward the construction of the Jellico extension this summer, and the cessation of building is expected to be but temporary. While the tightness of the money market is assigned by many as the cause of the suspension of work, it is entirely probable that the interests back of the line are only checking up because of the approach of the winter season, and that work will be resumed early in the spring. Ten miles of the Cumberland Railroad have been in operation for two years. The Jellico extension, planned to extend an additional 27 miles, is partly completed, much grading having been accomplished this summer and tunneling at two points having been almost finished up. As it is, the coal operators along the completed 10 miles ship their production out via the Louisville & Nashville, with which the Cumberland Railroad connects. The Jellico extension of the Cumberland is designed to give a southern outlet. It is now the general opinion that the Southern Railway is behind the Cumberland Railroad.

Much interest has been created here lately over new railroad surveys in Letcher county. It is the general opinion that the interests behind the South & Western project are seeking to extend a "feeder" into the Pound Gap coal fields of Eastern Kentucky. For years such a route as that now being gone over has been considered. Letcher county contains some of the richest coal deposits in Eastern Kentucky, the well-known Elkhorn coking coal being found in great richness. A large area of the county's mineral deposits is held by big Eastern corporations.

Construction work on the South & Western has been pushed during the summer. This line will connect the Elkhorn coal fields of Eastern Kentucky with the Seaboard system in North Carolina. Work on the line has been in progress in Tennessee and Virginia. Connection will be made with the Big Sandy division of the Chesapeake & Ohio Railroad through the "Breaks of the Sandy" at the Kentucky-Virginia boundary. W. S. HUDSON.

Virginia Bankers' Association.

The Virginia Bankers' Association has issued in book form a report of the proceedings of its fourth annual convention, which was held at the Jamestown Exposition on June 20 to 22 last, inclusive. The volume is handsomely printed and bound together with pictures of gentlemen prominent in the world of finance, including likenesses of the incoming and outgoing presidents of the Virginia Association. The new president is Richard H. Smith of Richmond, the retiring president being Albert B. Schwarzkopf of Norfolk. The secretary is N. P. Gatling of Lynchburg, and the treasurer is H. A. Williams of Richmond.

State Banks in South Carolina.

A condensed statement of the 217 State and private banks in South Carolina September 17, 1907, shows loans and discounts, \$39,519,407; demand loans, \$1,622,374; due from banks and bankers, \$4,529,090; currency, gold, silver, nickels and pennies, checks and cash items, \$1,961,230; capital stock paid in, \$8,559,750; surplus fund, \$1,515,693; undivided profits, less current expenses and taxes paid, \$2,757,223; due to banks and bankers, \$673,298; individual deposits subject to check, \$15,617,913; savings deposits, \$12,455,843; total resources, \$53,375,527.

THIRTEENTH ANNUAL REPORT OF THE SOUTHERN RAILWAY COMPANY

Year Ended June 30, 1907.

New York, October 3, 1907.

To the Stockholders of the Southern Railway Company:

The President and Board of Directors submit the following report of the affairs of the Company for the year ended June 30, 1907:

INCOME STATEMENT.

The income account for the year, as compared with that for the previous year, is as follows:

	1907.	1906.	Increase.
Miles of road operated, average.....	7,546.86	7,373.96	172.88
Gross earnings from operation.....	\$56,657,994 39	\$53,641,438 67	\$3,016,555 72
Operating expenses and taxes.....	44,689,282 22	39,773,139 04	4,926,143 18
Net earnings from operation.....	\$11,968,712 17	\$13,868,299 63	Dec. \$1,900,587 46
Income from other sources.....	1,829,281 47	1,589,000 50	240,280 97
Total income.....	\$13,797,993 64	\$15,457,300 13	Dec. \$1,659,306 49
Interest and rentals.....	\$11,265,615 86	\$9,853,358 49	\$1,412,257 37
Other deductions from income.....	232,056 71	374,575 67	Dec. 142,518 96
Total deductions.....	\$11,497,672 57	\$10,227,934 16	\$1,269,738 41
Balance over fixed charges.....	\$2,300,321 07	\$5,229,365 97	Dec. \$2,928,744 90
Dividends on preferred stock:			
No. 17, 2½ per cent., paid in April, 1906; No.			
19, 2½ per cent., paid in April, 1907.....	\$1,500,000 00	\$1,500,000 00	Dec. \$1,500,000 00
No. 18, 2½ per cent., paid in October, 1906.....			
\$1,500,000 00	\$3,000,000 00	Dec. \$1,500,000 00	
Balance over preferred dividends.....	\$790,321 07	\$2,229,365 97	Dec. \$1,438,744 90
Special appropriations for improvements, betterments and charges not to be capitalized....	536,334 29	999,827 10	Dec. 463,492 81
Balance carried to credit of Profit and Loss....	\$253,986 78	\$1,229,238 87	Dec. \$975,252 09

The financial condition of the Company at the close of the year is shown by the Comparative Balance Sheet, Table 1, Pages 28 and 29 of pamphlet report, from which it will appear that the balance to the credit of Profit and Loss at the close of the year was \$253,986.78. An additional dividend of 1½ per cent. upon the preferred stock, calling for a distribution of \$900,000, has been declared out of accumulated surplus and will be paid October 17, 1907. This, with the dividend declared in March and paid in April, 1907, makes a total dividend distribution of 4 per cent. for the year.

A statement of the financial operations of the Company during the year, in the usual detail, will be found in the report of the Comptroller, hereto annexed.

The accounts of the Company have been examined by certified public accountants, Messrs. Patterson, Teele and Dennis, and their certificate is made a part of this report.

THE PROVISION OF NEW CAPITAL.

During the year bonds and notes of the aggregate par value of \$32,652,000 have been sold. These additions to Capital Account are principally responsible for the increase of \$1,412,257.37 shown in the Income Account as the net increase in Interest and Rentals. The actual net increase in the Funded Debt by reason of obligations issued during the year (including \$9,821,300 of bonds still in the treasury of the Company, unsold), as shown by the balance sheet, was \$26,717,900. The details of this are as follows:

New obligations issued during the year were:

Southern Railway Company First Consolidated Mortgage 5 per cent. Bonds.....	\$1,950,300
Southern Railway Company Memphis Division First Mortgage 5 per cent. Bonds....	700,000
Southern Railway Company Mobile & Ohio Coalfield 4 per cent. Bonds.....	11,000
Southern Railway Company St. Louis Division First Mortgage 4 per cent. Bonds.....	250,000
Southern Railway Company Development and General Mortgage 4 per cent. Bonds.....	8,852,000
Series A.....	
Southern Railway Company Three-Year 5 per cent. Notes, due February 1, 1910.....	15,000,000
	\$26,762,300

Reductions during the year were:

Richmond & Danville Equipment Sinking Fund Mortgage 5 per cent. bonds, retired.....	\$2,000
Charlotte, Columbia & Augusta Railroad First Mortgage 5 per cent. Bonds.....	22,000
Extended, retired.....	21,400
Charlottesville & Rapidan First Mortgage 6 per cent. Bonds, retired.....	45,400

Net increase in Funded Debt.....\$26,717,900

All of the bonds above described were issued, in pursuance of the terms and restrictions of the several mortgages securing them, for the acquisition of additional property and for improvements chargeable to Capital Account.

Pending the marketing of the bonds mentioned above as still in the treasury and of additional Development and General Mortgage Bonds which, under the terms of the mortgage, may be issued during the current and subsequent fiscal years, the \$15,000,000 Three-Year Five Per Cent. Notes were issued and sold to reimburse the treasury for cash theretofore, and during the remainder of the year, expended for the enlargement of the existing plant, in the construction and acquisition of additional tracks, equipment and other facilities, and to pay for new properties heretofore acquired. It is contemplated that all of these expenditures shall ultimately be cared for in the sale of Development and General Mortgage Bonds provided for that purpose.

The capital necessary to complete the various union passenger stations in which this Company is a joint proprietor with other railroad companies, and which are now under construction in response to urgent demands of several of the most important cities of the South, was provided during the year by the sale, on most satisfactory terms, of capital obligations of the terminal companies in whose names the work is being done, such obligations being guaranteed by the proprietary railroad companies which will use such union stations and contribute to the interest charge on the basis of user. In this way Southern Railway Company has joined with others during the year in guarantees on bonds or notes issued and sold by Gulf Terminal Company of Mobile, Ala.; Birmingham Terminal Company, Charleston Union Station Company, Chattanooga Station Company, Meridian Terminal Company and New Orleans Terminal Company. The proceeds of these guaranteed terminal obligations will suffice to finance the several undertakings, for which purpose the issue of securities is strictly limited in each case.

THE EXPENDITURE OF NEW CAPITAL.

The purpose of the policy of establishing the territorial relations of the Company may now be considered to have been attained, and the policy of the future would seem to be a concentration of resources upon building up and strengthening the established lines in the system on which the possibilities of earnings are no longer problematical. This involves, first of all, the addition of second track and the revision of grades and curvature on the lines now burdened with the heaviest traffic. Much has been done in this direction, but much more remains to be done.

Double Track and Revision of Grades and Curvature:

When the construction work now under contract is completed Southern Railway will have the following double track:

	Miles.
Alexandria, Va., to Orange, Va.....	78.51
Monroe, Va., to Sycamore, Va.....	37.40
Through Galveston, Va.....	2.25
Danville, Va., to Pelham, N. C.....	10.20
Two miles north of Greensboro, N. C., to Salisbury, N. C.....	52.10
Through Charlotte, N. C.....	2.57
Asheville, N. C., to Biltmore, N. C.....	2.29
Asheville, N. C., to Craggy, N. C.....	4.40
Morristown, Tenn., to Knoxville, Tenn.....	41.42
Chattanooga, Tenn., to Ooltewah Junction, Tenn.....	14.87
Knoxville, Tenn., to Coster, Tenn.....	1.94
Atlanta, Ga., to Austell, Ga., and Atlanta Belt.....	23.58
Between Columbia, S. C., and Charleston, S. C.....	6.19
Between East St. Louis, Ill., and New Albany, Ind.....	6.37
Woodlawn, Ala., to Birmingham, Ala.....	2.13
Between Tusculum, Ala., and Sheffield, Ala.....	.97
Kansas City Junction, Trezevant Avenue, Memphis, Tenn.....	1.88
Spartanburg to Spartanburg Junction, S. C.....	2.00
Union Street Branch, Alexandria, Va.....	1.14
Total.....	292.43

Of this total there was in service at the close of the year 208.81 miles.

In the construction of this second main track the first efforts have been directed to those places where the traffic is densest. Therefore, between points where two or more lines converge and heavy traffic is thrown over the line double track has been constructed. Such gauntlets exist between Salisbury, N. C., and Greensboro, N. C.; Knoxville, Tenn., and Morristown, Tenn.; Atlanta, Ga., and Austell, Ga., and Chattanooga, Tenn., and Ooltewah Junction, Tenn. At Lynchburg, Va., on account of the connections with the Chesapeake & Ohio and Norfolk & Western Railways, together with the present heavy grades and the difficulty of getting proper facilities through that city, the new line around Lynchburg has become a necessity, and the double track for approximately 30 miles south of that point is essential for the successful and economical handling of freight and passenger traffic.

These gauntlets, when they were only single-track lines, limited the capacity of Southern Railway, since practically all of the traffic handled by the system between the East and West and the North and South had to pass over one or more of the gauntlets, and the maximum capacity of single-track lines had been reached. Not only did the effect of this throttling apply to the gauntlets, but it affected the development of all of the branch lines and practically the whole system.

The double track already in service has demonstrated the wisdom of the policy.

Furthermore, in order to meet the growing demands of the traffic, there is necessity, after completion of the present work, for additional second track as rapidly as it can consistently be provided. Second main track should be provided from Orange, Va., on the Washington Division, to Charlotte, N. C.; of course, the busiest part of this line to be improved first, so as to get relief quickly. On the line between Clinton, Tenn., and Knoxville, Tenn., over which a heavy and increasing volume of coal and other traffic is moved, and also on the line between Asheville, N. C., and Morristown, Tenn., there is need for second track. In addition to the above, there should be, radiating from all principal terminals, double track for a distance of 5 or 10 miles, so as to facilitate the movement of trains in and out of the terminals.

What has been done to carry out this general policy with the means available during the past year may be recorded as follows:

The second main track between Pomona, N. C., and High Point, N. C., a distance of 11.9 miles, referred to in the last annual report, was completed, and also double track between High Point and Spencer, N. C., a distance of 32.3 miles, was practically completed and in service at the close of the year, although there is some additional work necessary to complete ballasting and some of the passing tracks. The construction work should be entirely finished by October 15, 1907. The completion of this work provides double track between Greensboro, N. C., and Spencer, N. C., and gives a much-needed facility. The grades have been reduced from a maximum of 52 feet to 40 feet to the mile, and the alignment has been improved by the elimination of 130 degrees of curvature. At the close of the year the benefits from the improved grades were being derived, and standard freight engines heretofore handling trains of 1300 tons are now handling 1600 tons. Furthermore, additional economies have been secured on account of the double track. Freight trains between Greensboro and Spencer now consume about one-third as much time as formerly.

The construction of second main track and revision of grades and curvature between Winesap, Va., and Sycamore, Va., at the close of the year were well under way. Within 90 days the grading should be finished between Durmid, Va., and Sycamore, Va., a distance of 30 miles, and this part of the line should be completed and in service before January 1, 1908. Between Winesap and Durmid, including the line through the City of Lynchburg, a distance of 6.9 miles, the work is heavy, especially a tunnel of 1300 feet in length. When the work between Winesap and Sycamore is completed the ruling grades will have been reduced from a maximum of 74 feet to 48 feet to the mile northbound and 63 feet to the mile southbound. The maximum curvature of the present line is 10 degrees and of the new line 3 degrees. The new line eliminates 1600 degrees of curvature.

Near Galveston, Va., for a distance of 2.26 miles, the grading for the second main track on revised alignment and grades is practically completed and the tracklaying will be finished during the early part of the current fiscal year. This work eliminates much objectionable curvature and obviates the necessity of renewing a viaduct.

The second main track and grade revision between Peyton, Ga., and Austell, Ga., a distance of 11.56 miles, were completed in April, 1907, with exception of the double-track bridge over Chattahoochee River, the masonry for which was practically completed at the close of the year, and the new structure is on hand ready for erection. The new line reduces the grade from a maximum of 69 feet to 42 feet to the mile, and the curvature from a maximum of 8 degrees to 2 degrees 30 minutes, thereby eliminating 180 degrees of curvature. The old line had numerous wooden trestles and was subject to serious damage from high water, which frequently caused interruption of traffic. The new line has no trestle work and the dangers from high water have been eliminated. This double track has materially improved the train movement, both for trains between Atlanta and Chattanooga and between Atlanta and Birmingham, and has effected a considerable saving in train expenses.

On the Knoxville Division there has been completed during the year double track from Knoxville, Tenn., to Mascot, Tenn., a distance of 12.25 miles, and from Jefferson City, Tenn., to New Line, Tenn., a distance of 10.32 miles. The work between Mascot and Jefferson City, a distance of 14.3 miles, including a new double-track bridge over the Holston River, at the close of the year is rapidly approaching completion, and by the middle of October double track should be in operation for the entire distance between Knoxville and New Line. The new line eliminates 484 degrees of curvature and overflow by high water. The double track already in service between these points has greatly aided the operation of trains. Heretofore, on account of the large number of trains handled, it has required an average of about 10 hours for a freight train to make the run between Knoxville and New Line. With the improved facilities this time has been reduced to about three hours. With the completion of the work between Mascot and Jefferson City trains will move with still greater facility and economy.

Between Asheville, N. C., and Craggy, N. C., a distance of 4.4 miles, grading for double track is about seven-eighths completed. This improvement will reduce the maximum curvature from 9 to 6 degrees. Most of the second main track will be put into service at an early date. The new track is constructed with permanent work throughout, including a concrete viaduct over the French Broad River, and the expensive maintenance of several wooden structures is eliminated.

Between Ooltewah Junction, Tenn., and Citico, Tenn., a distance of 13.75 miles, the double-track work was about one-half completed at the close of the year. The grades were reduced from a maximum of 69 to 40 feet to the mile, and the maximum curvature reduced from 4 degrees 15 minutes to 3 degrees.

In order to illustrate more clearly the character of the work done in the way of revision of grades and curvature, there are attached to this report maps and profiles of the most important pieces of the work hereinbefore discussed.

Carolina & Tennessee Southern Railway:

Tennessee & Carolina Southern Railway:

There has been under construction during the year a line extending from Bushnell, N. C., westwardly along the north bank of the Little Tennessee River to a point on the North Carolina-Tennessee State line, a distance of 26 miles, with a maximum grade of one-half of 1 per cent. and 8 degrees maximum curvature. The grading is completed from Bushnell westwardly for a distance of 15.4 miles.

A line is also under construction from Maryville, Tenn., southwestwardly to the Little Tennessee River; thence along the north bank of Little Tennessee River to a point on the Tennessee-North Carolina State line, joining there with the line first above described, a distance of 38.8 miles. The grading on this line has been completed for a distance of 37.4 miles.

Upon completion of this work there will be a continuous line from Bushnell, N. C., to Maryville, Tenn., a distance of 64.8 miles, the maximum grade of which will be one-half of 1 per cent. With the completion of this line and by an extension from Bushnell up the valley of the Little Tennessee to Franklin, N. C., and there connecting with the Tallulah Falls Railway, which has recently completed its line through Rabun Gap to Franklin, a through line could be established with a maximum grade against the loading of one-half of 1 per cent. Such a line would enable the economical handling of traffic originating in the Knoxville territory and north and west thereof, destined to the consuming territory of Georgia and South Carolina, avoiding the necessity of handling this traffic over the heavier grades via Asheville and Spartanburg.

Ensley Southern Railway:

During the year there has been under construction an extension of the Ensley Southern Railway from its present terminus at Short Creek, Ala., in a general northwesterly direction to Coal Creek, a distance of 3.39 miles, upon a maximum grade of 39.6 feet per mile, with a maximum curvature of 8 degrees. This line is known as "Pratt Consolidated Coal Company's Extension No. 1." The grading is completed and tracklaying has begun, there being at the end of June about one-half mile of track laid. In addition to the above line, there is also a spur being built up Coal Creek, 1.47 miles, extending from the above-mentioned line near its terminus. This spur will have a maximum grade of 1 per cent. and a maximum curvature of 8 degrees. The grading has been completed and track will be laid as soon as the line is completed to the end of Extension No. 1. Extensive coal-mining operations are being established on both of these spurs.

Memphis-Chattanooga Railway:

During the year the construction of the Memphis-Chattanooga Railway, as previously reported, was continued. This line extends from Chattanooga, Tenn., crossing the Tennessee River at "The Narrows" and thence through the Valley of the Tennessee to a connection with the Memphis Division of Southern Railway at Stevenson, Ala., a distance of 42 miles. Grades on the new line are lighter than those on the line of the Nashville, Chattanooga & St. Louis Railway, over which trains are now being operated. The grading and masonry on line from point of connection with Belt Line near Chattanooga to east portal of Lookout Mountain tunnel is about 90 per cent. completed. The double-track tunnel through Lookout Mountain, 2500 feet in length, has been successfully driven and is practically completed, only the arching near the portals remaining to be done. Both approaches of Raccoon Mountain tunnel are out and the tunnel excavation is under way. About 25 per cent. of the grading from Raccoon Mountain tunnel to Tennessee River crossing has been completed. From Tennessee River crossing to the State line all of the grading and masonry has been done, including that at crossings of Battle Creek, Sequatchie River and Tennessee River, and 1.3 miles of track have been laid out from South Pittsburg, Tenn. Erection of the bridge over Battle Creek is about completed, and the structures for Sequatchie River and Tennessee River crossings are on the ground ready for erection.

Jasper-French Lick Extension:

Construction of the line from Jasper, Ind., to French Lick, Ind., referred to in the previous annual report, has steadily progressed, and the indications are that it will be in service during November, 1907. The line extends from Jasper in a northeasterly direction to French Lick, a distance of 24.7 miles. It has one tunnel, 2000 feet long; a maximum grade of eight-tenths of 1 per cent. and a maximum curvature of 6 degrees. With the completion of this line a large amount of traffic now handled over the heavier grades between Huntington, Ind., and New Albany, Ind., can be diverted to the new line and greater economy of handling thereby obtained, while an entirely new source of profitable traffic is expected through the new connection thus afforded with the Chicago, Indianapolis & Louisville Railway.

Okolona-Big Creek Line in Mississippi:

The extension of the Okolona-Big Creek Line in Mississippi from Vardaman, Miss., to Calhoun City, Miss., a distance of 8.2 miles, reference to which was made in a previous report, was completed and placed in operation December 12, 1906.

Terminal Improvements:

During the year substantial additions have been made to the yards at Spencer, Winston-Salem and Asheville, N. C.; Greenville, Branchville and Hamburg, S. C.; Meridian, Miss.; Hamilton Springs, Tenn.; Mobile, Ala., and Toccoa, Ga.; new station buildings have been under construction at High Point, Reidsville and Salisbury, N. C.; Gaffney, S. C.; Decatur and Birmingham, Ala., and Burkeville, Va.; new roundhouses and other facilities to care for locomotives have been added at Monroe, Va.; Charlotte and Asheville, N. C.; Greenville, S. C., and Inman Yard, Ga. There is much more work of this kind which should be undertaken at an early date.

Purchase of Equipment:

During the year payments, chargeable to Capital Account, amounting to \$3,017,735.47, were made for account of rolling stock heretofore acquired. Since June 30, 1906, the Company has purchased new rolling stock costing \$43,235,963.18, largely represented by obligations issued under equipment trusts. Of this total there has been paid during the past seven years \$22,718,176.21, the difference representing the balance outstanding at the close of the year.

OPERATING CONDITIONS.

The conditions of operation during the past year have been extraordinary. The investment of new capital in the construction of double track, additional yards and new lines has increased the fixed charge upon the revenues of the Company without securing for the moment an immediate corresponding benefit, a relief which can come only with the completion of the new work. It is more apparent every day that the benefit will more than offset such increased fixed charge when the new facilities are put in operation, as they will be largely during the current year.

Great as are the burdens upon the operation of a railroad today by reason of the increased cost of material of all classes and the unabating expectations of labor, on the one hand, and legislative reduction of revenue and increased taxes, on the other hand, the crying need of the railroads of the South is more track, more equipment, more terminal facilities. With the strategic position and established relations which Southern Railway Company now has, there would be no stint in the amount of traffic it could obtain and profitably handle if it had the facilities necessary to afford to those who offer traffic the service they demand. During the past winter there were serious congestions of freight on the lines of this Company, which were due, almost without exception, to the failure of the plant to respond to demands which were made upon it beyond its capacity. While exasperating the public, congestion rolls up the expense of operation, and both shipper and carrier suffer.

Some of the most acute causes of the congestion of the past year will happily not exist another year. The construction of new double track, now nearing completion, on the Cincinnati Southern Railway will open for an important part of Southern Railway traffic the connection over which all business between its main system and the St. Louis-Louisville Lines is moved, a connection which last winter was paralyzed. The recent completion of the double track on revised grade in the main line between Spencer, N. C., and Greensboro, N. C., and the approaching completion of double track between Knoxville, Tenn., and Morristown, Tenn.—funnels through which large volumes of business are poured—will be a further relief, a saving in almost every element of the expense of operation, especially overtime of labor, fuel and hire of foreign equipment. The expected completion before January 1, 1908, of the double track now under construction south of Lynchburg will have a similar effect.

These facts merely serve to illustrate that the problem of economical operation upon Southern Railway lines under existing conditions is the problem of providing additional facilities and of keeping ahead rather than behind the demands of business. As more facilities are provided greater economies and increased net earnings may be expected.

Apart from congestion of traffic, the expenses of operation, of which mention has been made, have been extraordinary. To illustrate: During this fiscal year the rates of pay of machinists, boilermakers, blacksmiths, fitters and pipemen, carmen, engineers, firemen, conductors, trainmen, operators and maintenance of way employees were substantially increased, this increase approximating \$1,250,000 per annum, while the greater price at the mines, together with freight charges paid for coal purchased for the Virginia and North Carolina lines from mines on other railroads, added nearly \$250,000 to the cost of fuel in the same period. If comparisons are made with the cost of material and labor several years ago, the present burden is still more apparent. Since 1898 the cost of bridge timber increased from \$9.36 to \$23.59 per thousand feet; cross-ties from 28 to 37.6 cents per tie; steel rails from \$17.75 per ton to \$29 per ton; fuel coal from 89 cents to \$1.37 per ton; the cost of labor, per mile of road, has increased from \$1621.67 in 1896 to \$2513.64 in 1906, with a further advance to \$2839.11 in 1907.

On the Southern Railway these causes have sometimes produced disappointing results, but the officers believe in the property, know its possibilities, and, with the loyal co-operation of all classes of employees, look forward confidently to the future.

Attention is invited to the report hereto appended of the Vice-President and General Manager, giving the customary details showing results of operation.

THE INHERENT COMMERCIAL STRENGTH OF THE PROPERTY.**In Traffic:**

The remarkable growth of diversified industry in the South, particularly along the lines of this Company, in recent years has created an internal traffic largely local as to its origin, but covering a wide field in its distribution. This has given the Company a sound basis of independent operation and a commanding position in its negotiation for traffic from outer sources.

The extent and diversity of this commercial expansion and its beneficial effect on the interests of the Company can only be fully appreciated by close and careful analysis. It is fully reflected in the tonnage statistics of the annual reports. The main facts are that the South now melts more than half the pig-iron and converts into cloth and garment more than one-fifth the cotton which it produces. Its phosphate beds have formed the basis for the manufacture of commercial fertilizer on such a scale as to make the South independent of outside sources of supply and to add greatly to her agricultural productiveness. The manufacture of furniture has grown to such proportions as are not exceeded in any other like section of the country, yet without decrease in the volume of lumber sent from the South to other markets of this country and abroad.

The production of coal has, with difficulty, kept pace with the development of industry, not because of inadequate supply, but because of restricted transportation facilities.

The cultivation of fruits and vegetables has afforded a large and increasing flow of that class of traffic to the eager markets of the East and North.

That this commercial growth will continue along healthy lines is assured by profitable operation in the past and a continuing increase in demand. That it must take place in a large measure along the lines of this Company is certain, because of the abundant supplies of fuel and raw materials originating along its rails, and because of the outlet it affords to all consuming markets. The Company is therefore assured of a continued increase in its internal traffic with respect to both raw materials and manufactured products. A single industry, the operation of which will soon begin will add one-half million tons to its freight traffic and as many dollars to its annual gross revenues.

The existing relations with connections by land and sea are most satisfactory. The conditions of interchange are such as to justify the claim for increased tonnage on reciprocal grounds. Traffic arrangements with steamship connections at Virginia, South Atlantic and Gulf ports afford the fullest opportunity for the development of the maxima of export, import and coastwise traffic. Through service and a complete package car system, operated with chief connections and supported by efficient traffic organizations, guarantee a large increase in the higher classes of traffic.

Reciprocal relations with lines serving the great grain and grazing sections of the North and West have enabled the Company to share in a large way in the movement of meat, grain and grain products from those sections into the South and East. The large consuming section served and the important milling interest located on the lines of this Company add greatly to its strength in the control of this important traffic.

In Industrial Opportunity:

Southern Railway lines have enjoyed and are destined to increasingly share in the extraordinary industrial opportunity which exists in the South. Those lines penetrate a territory whose resources fully justify the rapidly increasing interest manifested in its economic development and progress. The minerals, timber and soils, all important elements in the best development of the nation's wealth, are paramount in the Southern country. The promotion of their proper development has received the particular attention of this Company, and the policy pursued in bringing the latent resources of the South to the attention of the world is redounding to the advantage of the railway and the rich territory it serves.

This territory is being covered with new manufacturing plants (the records show 560 new industrial enterprises completed and placed in operation during the year), while the numerous existing factories established since the organization of the Company are most successful and are being generally enlarged.

Particularly the forests of the South have attracted capital for their development. Several hundred woodworking plants alone were established in Southern Railway territory during the year. The second largest furniture industrial center in the United States (High Point, N. C.) is located on this Company's tracks. Along the lines of the Company 27 new furniture factories began operations during the year. Manufacturing wood pulp is a recent important industry, from which an entirely new and large volume of traffic may be expected. The abundant supply of necessary raw material and cheap power is attracting to the territory capitalists interested in the manufacture of paper, a promising industry from which large traffic may be ultimately expected. It is important, however, to remember that these industries can be perpetuated only if the sources of the supplies of raw materials are preserved. The forests of the South are today one of its chief assets, and there is opportunity to preserve them as such for all time. While other sections, by the indiscriminate cutting of their forests, have in great measure consumed their supplies of raw material for the manufacture of lumber and of everything in which wood is used, the South still has great areas in which the forests have been practically untouched. It is hoped that the Southern people will benefit by the mistakes of others. By the adoption of a system of intelligent forestry the woodlands of the South may be so used as to yield a substantial immediate profit and at the same time be so preserved and reproduced as to be a continuing source of wealth for future generations. The railway companies which depend so largely upon the forests for the material they consume, not to speak of commercial traffic, are fully alive to these considerations, and this Company is co-operating in all reasonable ways to preserve this important element in the inherent strength of its commercial position.

The textile industry of the South is largely confined to the districts reached by this Company's lines, and gives promise of great future growth by the erection of more mills and enlargements. During the year 45 new textile manufacturing plants were completed and placed in operation in the territory served by Southern Railway lines. The electrical power developments directly tributary to the lines, and the mining districts supplying cheap coal, make beyond all peradventure the districts served pre-eminent in the South for profitable manufacturing.

Co-ordinate with the promotion of the industrial development is the practical solicitation of immigration. The general advertising by this Company of the merits and possibilities of the country has proven an influential factor in introducing prospective immigrants to the possibilities of the South.

A line of work has been carried on which tends to very greatly diversify the agricultural products of the territory and to establish the value of Southern lands for a widely varied husbandry. More skilled methods of agriculture are greatly increasing the amount and value of farm products, of which there is direct evidence in the substantial increase of land values throughout all States traversed by Southern Railway lines.

RELATIONS WITH THE PUBLIC.

As a railway must depend for its prosperity on the confidence and support of the public served by it, the policy of Southern Railway Company is to merit the confidence and support of every community which it serves. Efforts are being made to cultivate closer relations with all the public and especially with the men in all lines of business who are most directly interested in the adequacy and efficiency of transportation facilities, and to bring about a realization on their part that the Company has a direct and vital interest in the success of their individual enterprises and in the prosperity of their communities. In all the dealings of the Company with the public it is the purpose of the management to cultivate a spirit of co-operation, to deal justly with all the patrons of the Company on the basis of sound business and economic principles, and to this end particularly special efforts have been made to bring about courteous and considerate treatment by all employees of every person transacting business with the Company. These endeavors have not been fruitless. There is increasing evidence that the thinking people in the territory served by the Southern Railway appreciate the fact that they can only attain the highest degree of prosperity if they are served by carriers able to increase their facilities so as to keep pace with the growing demand for their service and the fact that increased transportation facilities are of much more importance to them than any possible reduction in charges. There is a growing public opinion among those who actually use the railways of the South in favor of legislative and administrative policies that will recognize that a railway company is a business institution, subject to the same economic laws that control all other business enterprises, and that it cannot obtain new capital for the enlargement of its facilities unless investors can have a reasonable assurance that its income will be sufficient to defray its operating expenses and fixed charges and leave a reasonable balance for dividends and surplus.

It must be recorded, however, that during the year drastic action was taken by some of the States in which this Company operates (similar to action taken in many of the other States of the Union) to reduce the maximum passenger rates. In the States of Illinois and Indiana, where the interests of this Company were small in comparison with other lines, it followed the lead of the lines having most at stake and put the reduced rates into effect under protest, reserving the right to contest them in the future. In the State of Alabama, where a two-and-one-half-cent rate was established by the Legislature; in the State of North Carolina, where a two-and-one-quarter-cent rate was established by the Legislature, and in the State of Virginia, where a two-cent rate was established by the Corporation Commission, the interests of this Company were so large and the effect of the reduced rate so hurtful to its revenues that, by direction of the Board of Directors, suits were brought in the appropriate Federal Courts to test the constitutionality of the rates and to secure for the property the protection of the Fourteenth Amendment to the Constitution of the United States.

The disputed rates have been put into effect pending determination of these cases on their merits, but were not done, however, until the record was put into shape to present the fundamental questions involved to the Supreme Court of the United States. The Board has considered it essential, not only in the interest of the owners of the property, but in the interest of the public (whose interest it is that the railroads shall not be deprived of the means of providing adequate facilities for the commerce of the country), that the issues raised by the action of these States, whether investments in railroad properties are entitled to the same measure of protection as other property, and whether they can be deprived, by any form of State action, of the effective protection of the Constitution of the United States, shall be finally settled with the least possible delay.

Appended to the Twelfth Annual Report of Southern Railway Company was one of the last expressions of the luminous intelligence of our late President, Mr. Samuel Spencer, the remarkable exposition of the financial necessities of the Company which served as the foundation upon which the Development and General Mortgage was built.

Appended to this report will be found the memorial resolutions adopted by the Voting Trustees and the Board of Directors of the Company at their joint meeting held immediately after Mr. Spencer's funeral service.

These two documents should be read together. They are an honorable monument and a living inspiration to those to whom the management of the property has descended.

The acknowledgments of the Board are due to all officers and employees for the faithful discharge of their duties during the year.

Respectfully submitted, by order of the Board,

W. W. FINLEY, President.

Arthur W. Teele, C. P. A. PATTERSON, TEELE & DENNIS, Cable Address, "Dignus."
John Whitmore, Certified Public Accountants,
Daniel C. Tate, C. P. A. New York and Boston.

30 Broad Street, New York, September 2, 1907.

To the Stockholders and Bondholders of the Southern Railway Company:

We have made an examination of the books and accounts of the Southern Railway Company for the fiscal year ending June 30, 1907, and have verified the Balance Sheet and Income and Profit and Loss Accounts published herewith.

The amount charged to Capital Accounts for expenditures during the year is, in our opinion, proper.

The securities owned have either been produced or we have obtained certificates from the various Trustees or Depositories holding the securities.

The valuation of the equipment in the Balance Sheet is fully borne out by the rolling stock on hand and the provisions made for replacement.

The method of arriving at the valuation placed upon the material and supplies on hand has been carefully examined, and the results reached in former inventories justify the present valuation.

The amounts due to the Company from the various sources cited in the Balance Sheet are believed to be collectible, due provision having been made in the reserves for such as are of doubtful realization.

Cash has either been counted or certificates obtained from the Depositories. All known liabilities have been stated, and sufficient reserves exist for such as have not yet been determined.

The charges against the year's income for the Maintenance of Way and Structures and Equipment have been, in our opinion, sufficient for the upkeep of the capital.

Respectfully submitted,

PATTERSON, TEELE & DENNIS,
Certified Public Accountants.

TABLE 1.

COMPARATIVE BALANCE SHEET, JUNE 30, 1907, AND JUNE 30, 1906.

JUNE 30, 1906.		ASSETS.		JUNE 30, 1907.	
\$277,968,164 89		Cost of Road:		\$277,968,164 89	
		Cost of Southern Railway Properties to June 30, 1906.....		9,467,235 44	
		Additions during the year (see page 30 of pamphlet report).....			\$387,435,400 33
		Total Cost of Road June 30, 1907.....			
\$21,997,307 91		Cost of Equipment:		\$21,997,307 91	
		Cost of Southern Railway Equipment to June 30, 1906.....		683,955 00	
		Trust Equipment received with Purchased Properties released from lien.....		2,997,272 97	
		Cost of Equipment charged to Capital during the year.....			
		Trust Equipment received with Purchased Properties.....			
683,955 00		Total Cost of Equipment June 30, 1907.....		25,975,535 88	
		Leasehold Estates:			
		Road.....		\$30,818,057 31	
\$30,818,057 31		Equipment.....		1,540,442 69	
1,540,442 69		Total Leasehold Estates. (Per contra).....		32,358,500 00	
		Southern Railway Trust Equipment. (Per contra).....		20,577,486 97	
		Total Cost of Road, Equipment and Leasehold Estates.....		\$366,039,923 18	
		Cost of Securities Pledged or Held for Control:			
		Pledged under First Consolidated Mortgage (see Table 7, page 40 of pamphlet report).....		\$13,306,634 97	
\$13,306,634 97		Pledged under Development and General Mortgage (see Table 8).....		3,043,758 06	
407,678 06		Pledged or deposited under various indentures (see Table 9, page 42 of pamphlet report).....		39,151,610 53	
39,066,468 43		Securities unpledged, held for control or as muniments of title.....		8,631,277 87	
5,089,830 10		Southern Railway Development and General Mortgage Bonds.....		64,095,251 43	
				8,565,000 00	
		Cost of Road, Equipment and Securities Held as Stated.....		\$435,700,204 61	
\$4,394,400 43		Material and Supplies on Hand (see Table 21, page 55 of pamphlet report).....		\$4,610,815 71	
284,203 73		Rail and Fixtures Leased.....		317,231 06	
				4,928,046 77	
		Total Capital Assets.....		\$440,628,251 38	
\$428,232,357 57		Miscellaneous Securities Owned—in Treasury Unpledged.....		1,100,432 03	
1,368,037 51		Bills Receivable—deferred, but secured.....		1,905,420 84	
1,277,995 68		Advances to Subsidiary Companies.....		2,613,478 36	
3,116,457 96		Income Accrued, Not Due.....		163,697 61	
290,938 47		Insurance Paid, Not Accrued.....		616 94	
2,978 01		Insurance Fund. (Per contra).....		647,963 29	
434,954 79		Sinking Funds—Uninvested Balance in hands of Trustees.....		1,000 00	
2,050 00		New Steel Rail.....		2,383,849 51	
2,682,607 81		Net Discount on Securities Sold—to be charged off during life of Securities.....		1,665,637 08	
		Sundry Accounts.....		610,189 33	
489,752 91		Current Assets:			
		Miscellaneous Current Securities.....		\$3,356,300 00	
\$4,491,000 00		Cash in hands of Treasurer, Banks and Financial Agents.....		9,816,961 11	
4,340,882 57		Cash in Transit from Agencies.....		1,244,453 79	
1,132,596 79		Due from Agents and Conductors.....		1,827,372 80	
1,475,935 99		Due from United States Postoffice Department.....		476,466 73	
477,559 97		Due from Other Transportation Companies.....		2,557,429 57	
1,612,472 29		Due from Individuals and Companies.....		1,403,369 77	
1,110,537 63		Bills Receivable—Current.....		2,924,403 87	
44,982 28				22,506,757 64	
				\$475,187,193 21	
14,685,966 52					
\$452,584,097 22					
		LIABILITIES.			
		Capital Stock:			
		Common.....		\$120,000,000 00	
\$120,000,000 00		Preferred.....		60,000,000 00	
60,000,000 00		Total.....		\$180,000,000 00	
		Southern Railway Mobile & Ohio Stock Trust Certificates.....		5,670,200 00	
		Funded Debt (see Table 5).....		202,349,800 00	
		Outstanding Securities of Leasehold Estates. (Per contra).....		32,358,500 00	
		Equipment Obligations (per contra):			
		Car Trust, Series A.....		\$212,000 00	
\$637,000 00		Equipment Trust, Series B.....		510,000 00	
850,000 00		Equipment Trust, Series C.....		1,145,000 00	
1,603,000 00		Equipment Trust, Series D.....		1,062,000 00	
1,416,000 00		Equipment Trust, Series E.....		2,305,000 00	
2,505,000 00		Equipment Contract, Series F.....		206,190 00	
291,510 00		Equipment Contract, Series G.....		501,600 00	
689,700 00		Equipment Trust, Series H.....		3,600,000 00	
4,050,000 00		Equipment Trust, Series K.....		2,380,000 00	
2,660,000 00		Equipment Trust, Series L.....		8,400,000 00	
9,000,000 00		Miscellaneous Equipment Contracts.....		255,696 97	
331,006 05		Certificate of Indebtedness, Fundable in Development and General Mortgage Bonds.....		20,577,486 97	
		Unmatured Obligations Account Purchase Tennessee Central Railroad Co. Prior Lien Bonds.....		1,719,130 71	
24,033,216 05		Unmatured Balance of Purchase Price of Northeastern Railroad of Georgia.....		107,000 00	
1,750,000 00		Unmatured Balance of Purchase Price of Virginia & Southwestern Railway Co. Stock, payable on and after July 1, 1908.....		1,453,000 00	
2,070,000 00		Unmatured Balance on Real Estate.....		7,730 60	
10,260 35		Balance on Hartwell (Ind.) Branch.....			
		Total Capital, Funded and Lien Liabilities.....		\$442,563,777 47	
\$422,325,201 40		Reserves:			
		For Maintenance of Way.....		\$2,412,581 79	
\$2,193,756 32		For Maintenance of Equipment.....		694,602 36	
58,092 67		Miscellaneous.....		59,493 91	
68,115 64		Interest and Rentals Accrued, Not Due.....		3,166,678 06	
		Taxes Accrued, Not Due.....		1,719,130 71	
2,319,964 63		Unmatured Obligations Account New Steel Rail Purchased, payable on and after July 1, 1908.....		673,224 67	
1,400,516 12		Insurance Fund. (Per contra).....		1,095,109 45	
606,522 81		Sundry Accounts.....		547,963 29	
2,667,250 35		Reserve for Dividend, No. 18, 2½ per cent., on Preferred Stock, paid in October, 1906.....		167,569 38	
434,564 79		Current Liabilities:			
142,367 45		Interest and Rentals Due and Unpaid, including amount due July 1.....		\$2,817,680 15	
1,500,000 00		Audited Vouchers.....		4,084,573 33	
		Materials and Supplies in transit, not vouchered.....		804,757 89	
\$2,676,809 32		Unpaid Wages, including June Payrolls.....		2,244,727 70	
3,132,813 05		Freight Claim Authorities Outstanding.....		141,521 80	
843,176 67		Due Other Transportation Companies.....		1,217,227 22	
2,026,619 41		Due Individuals and Companies.....		563,022 84	
127,635 45		Bills Payable.....		6,521,874 41	
1,158,077 00		Reserve for Undetermined Liabilities.....		655,082 00	
120,200 45		Profit and Loss (see Table 4).....		19,050,577 34	
2,260,714 29				6,242,162 74	
499,628 77				\$475,187,193 21	
12,845,674 41					
8,941,744 26					
\$452,584,097 22					
		FINANCIAL CONDITION.			
		COST OF ROAD:			
		The cost of road on June 30, 1907, was.....		\$387,435,400 33	
		The cost of road on June 30, 1906, was.....		\$277,968,164 89	
		Net increase during the year.....		\$9,467,235 44	
		The Additions During the Year Were as Follows:			
		Real estate at various points.....		\$385,112 58	
		Less:			
		Real estate sold.....		11,034 00	
		Jasper-French Lick Line extension (St. Louis Division).....		\$584,078 58	
		Okolona-Big Creek Line in Mississippi.....		691,724 94	
		Stevenson, Ala., extension: From Stevenson, Ala., to Chattanooga, Tenn.....		26,532 57	
		Maryville, Tenn., extension: From Maryville to Walland, Tenn.....		1,288,569 11	
		Miscellaneous New Branches and Spurs:		2,642 11	
		Birmingham Division.....		102,782 82	
		Charleston Division.....		100 00	
		Charlotte Division.....		13,625 11	
		Columbia Division.....		8,188 56	
		Coster Division.....		37,080 16	
		Danville Division.....		70 65	
		Knoxville Division.....		106,621 05	
		Mobile Division.....		14,935 74	
		St. Louis Division.....		49,132 38	
		Additional Yards, Extensions and Improvements:			
		At Inman yard, near Atlanta, Ga.....		215,291 59	
		At Asheville, N. C.....		276,455 87	
		At Greenville, S. C.....		28,080 88	
		At Charlotte, N. C.....		84,715 87	
		At Spencer, N. C.....		26,487 04	
		At various points on the:			
		Asheville Division.....		3,786 81	
		Birmingham Division.....		21,893 61	
		Charlotte Division.....		4,342 58	
		Coster Division.....		25,105 34	
		Chattanooga Division.....		16,305 91	
		Charleston Division.....		5,352 37	
		Columbia Division.....		42,370 48	
		Danville Division.....		23,514 26	
		Knoxville Division.....		6,210 22	
		Murphy Division.....		24,854 44	
		Mobile Division.....		42,042 64	
		Norfolk Terminal.....		8,608 61	
		Winston-Salem Division.....		31,462 77	
		Louisville Division.....		4,111 31	
		Second Main Track and Revision of Lines:			
		Washington Division.....		27,916 34	
		Atlanta Division.....		678,912 61	
		Charlotte Division.....		5,031 95	
		Chattanooga Division.....		465,465 18	
		Danville Division.....		4,312,126 28	
		Asheville Division.....		2,783 40	
		Knoxville Division.....		1,071,088 85	
		St. Louis Division.....		15,007 08	
		New passenger stations.....		65,886 30	
		New freight stations and additional facilities.....		166,927 62	
		Miscellaneous station buildings and facilities.....		90,383 09	
		New shop buildings, tools and machinery at various points.....		685,496 44	
		Improvements to docks and wharves.....		18,885 44	
		New coaling and water stations, roadway and other buildings.....		173,172 08	
		Interlocking and block systems.....		35,845 30	
		New steel bridges to accommodate heavier power (proportion in excess of renewals).....		104,292 67	
		Overhead and undergrade crossings.....		43,324 10	
		Net cost of passing, side and industrial tracks.....		738,097 39	
		Total.....		\$12,832,793 11	
		Less:			
		Miscellaneous credits.....		3,365,557 67	
		Net increase during the year.....		\$9,467,235 44	

COST OF EQUIPMENT:

The cost of equipment on June 30, 1907, was.....	\$25,678,535 88
The cost of equipment on June 30, 1906, was.....	22,681,262 91
Net increase during the year.....	\$2,997,272 97

This increase represents payments for new and additional equipment as follows:

49 Locomotives.....	\$775,105 86
27 Passenger Train Cars.....	193,474 21
2644 Freight Train Cars.....	1,981,557 26
7 Road Service Cars.....	45,088 14
3 Barges.....	22,500 00
	\$3,017,735 47

Less:

Floating equipment sold.....	20,462 50
Net increase as shown.....	\$2,997,272 97

FUNDED DEBT:

The Funded Debt outstanding on June 30, 1907 (including \$9,821,300 bonds owned by the Company as follows:

\$1,950,300 First Consolidated Mortgage Five Per Cent. Bonds,	
5,565,000 Development and General Mortgage Four Per Cent. Bonds, Series A,	
300,000 Memphis Division First Mortgage Five Per Cent. Bonds,	
1,500,000 Memphis Division Second Mortgage Five Per Cent. Bonds,	
500,000 Knoxville & Ohio First Consolidated Mortgage Four Per Cent. Bonds.	

\$9,821,300), was.....\$302,349,800 00

The Funded Debt at the close of the previous year (including \$15,143,000 First Consolidated Mortgage, Development and General Mortgage, and Divisional Mortgage Bonds owned by the Company) was.....175,631,900 00

Net increase during the year.....\$26,717,900 00

The Additions During the Year Were:

Southern Railway Company First Consolidated Mortgage Five Per Cent. Bonds.....\$1,950,300 00

Issued for the following purposes:

For improvements and betterments and for the acquisition of new property as provided for in the mortgage.....\$1,900,000 00

For retirement of an equal amount of Richmond & Danville Equipment Sinking Fund Five Per Cent. Bonds.....2,000 00

For retirement of an equal amount of Charlotteville & Rapidan Railroad First Mortgage Six Per Cent. Bonds.....21,000 00

For retirement of an equal amount of Charlotte, Columbia & Augusta Railroad First Mortgage Five Per Cent. Bonds, Extended.....22,000 00

For retirement of an equal amount of Franklin & Pittsylvania Railroad First Mortgage Six Per Cent. Bonds.....4,000 00

Scrip Certificates for balance due account of equipment and general purposes.....1,300 00

Southern Railway Company Memphis Division First Mortgage Five Per Cent. Bonds, issued for the construction of line from Stevenson, Ala., to Chattanooga, Tenn., as provided for in the mortgage.....700,000 00

Southern Railway Company Three Year Five Per Cent. Notes temporarily issued to reimburse the Company for construction expenditures.....15,000,000 00

Southern Railway Company Mobile & Ohio Collateral Four Per Cent. Bonds issued to acquire an equal amount of Mobile & Ohio Railroad Company General Mortgage Four Per Cent. Bonds.....11,000 00

Southern Railway Company St. Louis Division First Mortgage Four Per Cent. Bonds issued for improvements and betterments and for acquisition of new property as provided for in the mortgage.....250,000 00

Southern Railway Company Development and General Mortgage Four Per Cent. Bonds, Series A, issued for the following purposes:

To reimburse the Company for advances to Subsidiary Lines.....\$1,694,000 00

For improvements and betterments and for the acquisition of new property as provided for in the mortgage.....5,000,000 00

For proportion of equipment expenditures charged to Capital Account.....2,158,000 00

\$8,552,000 00

Of which Development and General Mortgage Bonds, Series A,

\$5,565,000, were in the treasury of the Company on June 30, 1907.

Total additions.....\$26,763,300 00

The Reductions During the Year Were:

Richmond & Danville Railroad Equipment Sinking Fund Mortgage Five

Per Cent. Bonds, retired.....\$2,000 00

Charlotte, Columbia & Augusta Railroad First Mortgage Five Per Cent.

Bonds, Extended, retired.....22,000 00

Charlottesville & Rapidan Railroad First Mortgage Six Per Cent. Bonds,

retired.....21,400 00

Total reductions.....45,400 00

Net increase in Funded Debt.....\$26,717,900 00

OUTSTANDING SECURITIES OF LEASEHOLD ESTATES:

The Outstanding Securities of Leasehold Estates on June 30, 1907, amounted to.....\$32,358,500 00

On June 30, 1906, they amounted to.....32,358,500 00

EQUIPMENT OBLIGATIONS:

Equipment Obligations outstanding on June 30, 1907, amounted to.....\$20,577,486 87

There were outstanding on June 30, 1906.....24,033,216 05

Net decrease during the year.....\$3,455,729 08

The Additions During the Year Were:

Miscellaneous Equipment Obligations issued in part payment for new equipment purchased during the year, payable in monthly instalments, final payment due in March, 1908, for:

4 Baggage, Mail and Express Cars,

25 Baggage and Express Cars,

10 Postal Cars,

6 Passenger and Baggage Cars,

157 Steel Double Hopper Coal Cars,

72 Steel Flat Bottom Gondola Cars,

the cost of which was.....\$562,930 85

The Reductions During the Year Were:

Payment of Obligations as matured, viz.:

Car Trust, Series A.....\$425,000 00

Equipment Trust, Series B.....340,000 00

Equipment Trust, Series C.....458,000 00

Equipment Trust, Series D.....354,000 00

Equipment Trust, Series E.....300,000 00

Equipment Contract, Series F.....85,320 00

Equipment Contract, Series G.....188,100 00

Equipment Trust, Series H.....450,000 00

Equipment Trust, Series K.....280,000 00

Equipment Trust, Series L.....600,000 00

Miscellaneous Equipment Obligations.....538,239 93

Total reductions.....4,018,659 93

Net decrease during the year.....\$3,455,729 08

The total equipment obligations outstanding on June 30, 1907, amounting to \$20,577,486.87,

represent unmatured balances on contracts covering the following equipment, viz.:

751 Locomotives,

33,354 Freight Train Cars,

196 Convertible Ballast Cars,

45 Passenger Train Cars,

10 Work Train Cars,

The contract price of which was.....\$38,534,157 55

Of which there has been paid to July 1, 1907.....17,956,670 98

Balance unmatured as stated.....\$20,577,486 87

TABLE 2.
1906.

INCOME ACCOUNT FOR YEAR ENDED JUNE 30, 1907, COMPARED WITH YEAR ENDED JUNE 30, 1906.

1906.		1907.
\$13,259,113 85	Gross Earnings:	
36,141,547 16	Passenger.....	\$14,683,005 65
1,900,915 63	Freight.....	37,368,094 67
1,458,632 29	Mail.....	1,828,344 80
881,229 74	Express.....	1,677,878 14
	Miscellaneous.....	1,100,671 13
\$53,641,438 67		\$56,657,994 39
	Operating Expenses and Taxes:	
\$7,122,355 17	Maintenance of Way and Structures.....	\$7,660,168 08
8,888,451 64	Maintenance of Equipment.....	9,576,041 88
20,810,939 66	Conducting Transportation.....	23,941,559 44
1,752,355 48	General Expenses.....	1,890,737 89
1,499,037 09	Taxes.....	1,630,734 93
39,773,139 04		44,699,282 22
\$13,868,299 63	Net Earnings from Operation.....	\$11,958,712 17
	Income from Investments:	
\$224,571 50	Dividends on Chicago, Indianapolis & Louisville Railway Co. Stock.....	\$224,571 50
283,558 00	Dividends on Mobile & Ohio Railroad Co. Stock.....	283,558 00
79,635 06	Dividends on Alabama Great Southern Railroad Co. Stock.....	103,500 00
12,600 00	Dividends on Old Dominion Steamship Co. Stock.....	12,600 00
10,000 00	Interest on Charleston Terminal Co. Bonds.....	10,000 00
40,000 00	Interest on St. Johns River Terminal Co. Bonds.....	41,640 00
6,750 00	Interest on Lancaster & Chester Railway Co. Bonds.....	6,750 00
101,645 00	Interest and Dividends on Georgia Southern & Florida Railway Co. Bonds and Stock.....	104,835 00
341,392 99	Interest and Dividends on Sundry Bonds and Stock.....	368,040 63
5,400 00	Interest on United States Government Bonds.....	5,400 00
68,208 40	Interest on Northern Alabama Railway Co. Bonds.....	77,625 67
14,732 22	Interest on Kentucky & Indiana Bridge and R. R. Co. Bonds.....	15,190 00
323,086 67	Interest on Mobile & Ohio Railroad Co. General Mortgage Bonds.....	323,812 34
28,453 33	Income from Shepherd's Ferry, Alexandria, Va.....	12,074 81
48,967 34	Net Income from Compresses and Other Property.....	25,368 87
	Miscellaneous Interest and Commissions.....	214,241 65
\$1,589,000 50	Total.....	\$1,829,281 47
	Miscellaneous Deductions from Income:	
\$226,808 00	Dividends accrued on Southern Railway Mobile & Ohio Stock Trust Certificates.....	\$226,808 00
96,898 76	Miscellaneous Interest and Commissions.....	
46,563 08	Accrued Interest on Tennessee Central Railroad Co. and Nashville Terminal Co. Bonds, July 1 to December 1, 1905, less net	
4,005 83	from operation Eastern Division Tennessee Central Railroad July 1 to December 1, 1905.....	5,248 71
\$374,875 67	Other Miscellaneous Deductions.....	
	Total.....	232,056 71
1,214,124 83	Net Income from Investments and Other Sources.....	1,597,224 76
\$15,082,424 46	Total Available Income.....	\$13,555,926 93
9,863,358 49	Fixed Charges, including Rentals (see Table 3).....	11,265,615 86
\$5,229,065 97	Balance of Income over Charges.....	\$2,290,321 07
	From which Deduct:	
\$1,500,000 00	Dividends Nos. 17 (2½%) and 19 (2½%) on Preferred Stock.....	\$1,500,000 00
1,500,000 00	Reserve for Dividend No. 18 (2½%) paid in October, 1906.....	
3,000,000 00	Total Dividends.....	1,500,000 00
\$2,229,065 97	Balance over Preferred Dividends.....	\$790,321 07
999,827 10	Special Appropriations for Improvements, Betterments and Charges not to be Capitalized.....	536,334 29
\$1,229,238 87	Balance carried to credit of Profit and Loss for the year.....	\$253,986 78

*Including	\$1,956,300	owned by the Company.
†Including	2,378,000	owned by the Company.
‡Including	5,565,000	owned by the Company.
§Including	10,365,000	owned by the Company.
¶Including	390,000	owned by the Company.
‡‡Including	400,000	owned by the Company.

TABLE 6.—OUTSTANDING SECURITIES OF LEASEHOLD ESTATES JUNE 30, 1907, COMPARED WITH JUNE 30, 1906.

Atlanta & Charlotte Air Line Railway:	Principal Interest.		Amount Outstanding	
	Due.	Rate.	June 30, 1907.	June 30, 1906.
1st Mtge. Pref. Bonds, Ext.	1910 J. & J. 4 1/2%		\$500,000 00	\$500,000 00
1st Mortgage Bonds, Ext.	1910 J. & J. 4 1/2%		4,250,000 00	4,250,000 00
Income Mortgage Bonds, Ext.	1910 J. & J. 4 1/2%		750,000 00	750,000 00
Stock	M. & S. 7%		1,700,000 00	1,700,000 00
			\$7,200,000 00	\$7,200,000 00
Atlantic & Danville Rwy.:				
1st Mortgage Bonds	1948 J. & J. 4%		\$3,925,000 00	\$3,925,000 00
2d Mortgage Bonds	1948 J. & J. 4%		775,000 00	775,000 00
			4,700,000 00	4,700,000 00
Georgia Midland Railway:				
1st Mortgage Bonds	1946 A. & O. 3%		1,650,000 00	1,650,000 00
Mobile & Birmingham R. R.:				
Prior Lien Bonds	1945 J. & J. 5%		\$600,000 00	\$600,000 00
1st Mortgage Bonds	1945 J. & J. 4%		1,200,000 00	1,200,000 00
Preferred Stock	J. & D. 4%		900,000 00	900,000 00
			2,700,000 00	2,700,000 00
North Carolina Railroad:				
Stock	J. & J.		4,000,000 00	4,000,000 00
Richmond & Mecklenburg Railroad:				
1st Mortgage Bonds	1948 M. & N. 4%		315,000 00	315,000 00
Southern Railway-Carolina Division:				
General Mtge. Bonds, Southern Ry.-Carolina Division	1952 J. & J. 4%		\$5,000,000 00	\$5,000,000 00
1st Mtge. Bonds, South Carolina & Georgia Railroad	1919 M. & N. 5%		5,250,000 00	5,250,000 00
1st Mtge. Bonds, Spartanburg, Union & Columbia Railroad	1905 J. & J. 4%		1,000,000 00	1,000,000 00
1st Mtge. Bonds, Sumter & Wateree River Railroad	1919 A. & O. 5%		100,000 00	100,000 00
1st Mtge. Bonds, Blackville, Alston & Newberry R. R.	1908 F. & A. 6%		9,500 00	9,500 00
1st Mtge. Bonds, Transylvania Railroad	1956 J. & J. 5%		434,000 00	434,000 00
			11,793,500 00	11,793,500 00
Total as per Balance Sheet			\$32,358,500 00	\$32,358,500 00

TABLE 13.—TRAFFIC STATISTICS, YEAR ENDED JUNE 30, 1907 AND 1906.

	1907.	1906.	Percentage of Inc. or Dec.
Average miles of road operated	7,546.86	7,373.38	Increase 2.34%
Passenger Traffic:			
Number of passengers carried	12,842,914	11,663,550	Increase 10.11%
Number of passengers carried one mile	599,161,080	549,518,645	Increase 9.03%
Average distance hauled per passenger (miles)	46.65	47.11	Decrease 0.98%
Total revenue from passengers	\$ 14,633,005.05	\$ 13,259,113.55	Increase 10.74%
Average receipts per passenger per mile	Cents 2.451	Cents 2.413	Increase 1.57%
Total passenger-train earnings	\$ 18,479,147.59	\$ 16,570,032.55	Increase 9.54%
Passenger-train earnings per mile of road	\$ 2,448.59	\$ 2,287.78	Increase 7.03%
Passenger-train earnings per train mile	\$ 1.08388	\$ 1.09073	Increase 5.19%
Average number of passengers in each train	35.14	33.57	Increase 4.68%
Average number of passengers in each car	12.53	12.27	Increase 2.12%
Freight Traffic:			
Revenue Freight:			
Number of tons carried	24,167,048	23,518,971	Increase 2.76%
Number of tons carried one mile	3,816,420,068	3,886,314,181	Decrease 1.80%
Average distance hauled per ton (miles)	157.92	165.25	Decrease 4.44%
Total freight-train earnings	\$ 37,368,094.67	\$ 36,141,547.16	Increase 3.39%
Average receipts per ton per mile	Cent 0.979	Cent 0.930	Increase 5.27%
Freight-train earnings per mile of road	\$ 4,961.48	\$ 4,901.23	Increase 1.03%
Freight-train earnings per train mile	\$ 1.97126	\$ 1.89932	Increase 3.79%
Average number of tons of freight in each train	201.83	204.23	Decrease 1.42%
Average number of tons of freight in each loaded car	14.80	14.45	Increase 2.42%
All Freight (Including Company's material hauled free):			
Number of tons carried	28,295,518	27,339,377	Increase 3.50%
Number of tons carried one mile	4,480,161,286	4,488,915,839	Decrease 0.20%
Average number of tons of freight in each train	226.34	235.90	Increase 0.19%
Average number of tons of freight in each loaded car	17.37	16.69	Increase 4.07%
Earnings and Expenses:			
Passenger and freight-train earnings	\$ 55,847,242.26	\$ 53,011,580.01	Increase 5.35%
Passenger and freight-train earnings per mile of road	\$ 7,400.06	\$ 7,138.01	Increase 2.94%
Gross earnings	\$ 56,657,994.39	\$ 53,641,438.67	Increase 5.62%
Gross earnings per mile of road	\$ 7,507.49	\$ 7,274.42	Increase 3.20%
Gross earnings per revenue train mile	\$ 1.63886	\$ 1.58374	Increase 3.35%
Operating expenses and taxes	\$ 44,699,282.22	\$ 39,773,139.04	Increase 12.39%
Operating expenses and taxes per mile of road	\$ 5,922.90	\$ 5,393.71	Increase 9.81%
Operating expenses and taxes per revenue train mile	\$ 1.29137	\$ 1.17428	Increase 9.97%
Net earnings	\$ 11,958,712.17	\$ 13,868,299.63	Decrease 13.77%
Net earnings per mile of road	\$ 1,584.59	\$ 1,880.71	Decrease 15.75%
Net earnings per revenue train mile	\$ 0.34549	\$ 0.40946	Decrease 15.62%
Train and Engine Mileage:			
Miles run by passenger trains	15,667,396	14,541,477	Increase 5.50%
Miles run by freight trains	17,564,725	17,503,133	Increase 0.35%
Miles run by mixed trains	1,391,711	1,525,532	Decrease 8.77%
Total revenue train mileage	34,613,832	33,570,142	Increase 2.20%
Miles run by work trains	1,502,634	1,666,532	Decrease 9.83%
Miles run by special trains	74,370	59,005	Increase 26.04%
Total train mileage	36,190,836	35,595,679	Increase 1.67%
Miles run by helping engines	713,541	570,677	Increase 25.03%
Miles run by light engines	473,539	437,595	Increase 8.21%
Miles run by switch engines	9,082,447	8,268,041	Increase 9.85%
Total engine mileage	46,460,363	44,871,992	Increase 3.54%
Car Mileage and Statistics:			
Mileage of loaded freight cars	257,858,637	268,964,943	Decrease 4.13%
Mileage of empty freight cars	80,067,732	97,062,347	Decrease 17.51%
Mileage of caboose cars	17,528,839	17,378,579	Increase 0.86%
Total mileage of freight-train cars	355,455,208	383,405,869	Decrease 7.29%
Mileage of passenger cars	50,604,362	47,494,446	Increase 6.55%
Mileage of baggage, mail and express cars	28,301,214	27,408,443	Increase 3.26%
Total mileage of passenger-train cars	78,905,576	74,902,889	Increase 5.34%
Mileage of work-train cars	4,808,122	5,306,670	Decrease 9.39%
Average number of loaded cars in each freight train	13.60	14.14	Decrease 3.82%
Average number of empty cars in each freight train	5.15	6.01	Decrease 14.31%
Average number of cars in each freight train	18.75	20.15	Decrease 6.95%
Percentage of loaded cars in each freight train	72.54	70.17	Increase 3.38%
Average number of passenger cars in each train	2.97	2.90	Increase 2.41%
Average number of baggage, mail and express cars in each train	1.06	1.63	Decrease 1.19%
Average number of cars in each passenger train	4.63	4.58	Increase 1.09%

*Excludes dining, cafe and special car mileage.

†Includes dining, cafe and special car mileage.

‡Includes caboose cars.

THIRTEENTH ANNUAL REPORT

OF THE

Georgia Southern & Florida Railway Co.

Year Ended June 30, 1907.

Macon, Ga., October 1, 1907.

To the Stockholders of the Georgia Southern & Florida Railway Company:

The President and Board of Directors submit the following report of the operations of the Company for the year ended June 30, 1907:

MILEAGE OPERATED.

The total mileage operated at the close of the year was 395 miles, the same as at the close of the year preceding:

Macon, Ga., to Palatka, Fla.	285	miles.
Valdosta, Ga., to Grand Crossing (near Jacksonville, Fla.)	106.61	"
Total length of main line	391.61	"
Trackage rights over St. Johns River Terminal Railway from Grand Crossing into Jacksonville	3.39	"
Total mileage operated	395	"

INCOME ACCOUNT.

	1907.	1906.	Increase.
Gross Earnings from Operation	\$2,273,315 36	\$1,944,946 12	\$328,369 24
Operating Expenses and Taxes	1,890,209 81	1,519,659 92	360,549 89
Net Earnings from Operation	\$383,105 55	\$425,286 20	Dec. \$32,180 65
Income from Other Sources	15,579 58	18,578 71	Dec. 2,999 13
Total Income	\$408,715 13	\$443,864 91	Dec. \$35,149 78
Interest on Funded Debt	\$270,050 00	\$270,050 00	
Interest on Equipment Obligations	20,389 62	13,655 68	\$6,733 94
Total Deductions	\$290,439 62	\$283,705 68	\$6,733 94
Balance of Income over Charges	\$118,275 51	\$160,159 23	Dec. \$41,883 72
Dividends on First Preferred Stock	\$34,200 00	\$34,200 00	
Dividends on Second Preferred Stock	54,200 00	43,360 00	\$10,840 00
Total Dividends	\$88,400 00	\$77,560 00	\$10,840 00
Balance carried to Credit of Profit and Loss	\$29,875 51	\$82,599 23	Dec. \$52,723 72

For details of Income Account see Table 2, page 12, of pamphlet report.

DIVIDENDS.

Dividends were paid during the year as follows:

Two and one-half per cent. on First Preferred Stock, paid November 15, 1906	\$17,100
Two and one-half per cent. on Second Preferred Stock, paid November 15, 1906	27,100
Two and one-half per cent. on First Preferred Stock, paid May 13, 1907	17,100
Two and one-half per cent. on Second Preferred Stock, paid May 13, 1907	27,100
Total	\$88,400

PROFIT AND LOSS ACCOUNT.

The Balance standing at Credit of Profit and Loss on June 30, 1907, was	\$683,970 26
The Balance standing at Credit of that account on June 30, 1906, was	671,969 75
Increase for the fiscal year ended June 30, 1907	\$12,000 51

FINANCIAL CONDITION.

The Financial Condition of the Company at the close of the year is shown in the Comparative Balance Sheet, Table 1, pages 10 and 11 of pamphlet report.

COST OF ROAD.

The cost of road on June 30, 1907, was	\$8,821,418 77
The cost of road on June 30, 1906, was	8,796,528 54
Net increase during the year	\$25,890 23

The additions during the year were as follows:

Valdosta, Ga., new brick warehouse	\$12,764 91
Valdosta, Ga., addition to freight depot	3,515 00
Macon, Ga., proportion of cost of new interlocking plant at Central of Georgia Railway Junction	7,267 82
Elko, Ga., land for section-house site	100 00
Pinehurst, Ga., land for location of pumping station	5 00
Cordele, Ga., land for additional yards	1,700 00
Dakota, Ga., land for section-house site	100 00
Eldorado, Ga., land for section-house site	37 50
New River, Fla., land for location of section-houses	100 00
	\$25,890 23

COST OF EQUIPMENT.

The cost of equipment on June 30, 1907, was	\$945,605 07
The cost of equipment on June 30, 1906, was	818,845 71
Net increase during the year	\$126,759 36

This increase represents payments on account of new and additional equipment, as follows:

6 Locomotives	\$49,846 67
500 Flat Cars	76,912 69
	\$126,759 36

Equipment Obligations.

Equipment Obligations outstanding on June 30, 1907, amounted to	\$458,693 33
There were outstanding on June 30, 1906	504,000 00

Net decrease during the year

	\$45,306 67
--	-------------

The additions during the year were:

Payment of obligations as matured, viz.:

Equipment contract between this Company and Burnham, Williams & Co., dated February 2, 1907, covering purchase of 6 locomotives, payable \$35,000 in cash and the balance in 12 monthly installments, bearing 5 per cent. interest, last installment due February 2, 1908	\$74,540 00
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The reductions during the year were:

Equipment Trust, Series A	\$36,000 00
Equipment Trust, Series B	59,000 00
Equipment contract, Burnham, Williams & Co.	24,846 67
Total reductions	\$119,846 67
Net decrease during the year	\$45,306 67

BUILDINGS AND STRUCTURES.

An addition was made to the general office building at Macon, Ga., by erecting a second story over the freight warehouse, and a steam-heating plant was installed.

The new freight depot at Valdosta, Ga., commenced during the previous year, has been completed. A new warehouse has been constructed at that point and a new passenger station is being erected.

A new depot was built at Lake Park, Ga., and new section-houses were erected and repairs made to station buildings, water tanks and docks at various points.

NEW EQUIPMENT.

During the year contracts were made for four express cars and one combination baggage and mail car, which were delivered in July, 1907, and for six 10-wheel combination passenger and freight locomotives, delivered during November, 1906. Two passenger cars were pur-

chased, and, together with the 500 40-foot flat cars of 60,000 pounds capacity, covered by Equipment Trust Agreement, dated March 1, 1906, were received during the year and added to the equipment.

EQUIPMENT ON HAND JUNE 30, 1907.

Locomotives.....	51
Passenger-train Cars.....	55
Freight-train Cars.....	3121
Road-service Cars.....	17

Being, in comparison with previous year:

Increase in Locomotives.....	6
Decrease in Passenger-train Cars.....	6
Increase in Freight-train Cars.....	504
Increase in Road-service Cars.....	4

Of this equipment 6 locomotives, 500 box cars, 25 stock cars, 600 flat cars and 40 coal cars are held under Equipment Trust. The balance of the equipment is owned by the Company.

Of the equipment destroyed during the year ended June 30, 1907, there are yet to be replaced 16 freight cars, for which provision has been made through the Reserve Funds.

MAINTENANCE OF EQUIPMENT.

During the year repairs were made to the following:

59 Locomotives,
39 Passenger-train Cars,
1045 Freight-train Cars,
6 Road-service Cars.

On June 30, 1907, there were in the shops undergoing repairs:

6 Locomotives,
2 Passenger-train Cars,
25 Freight-train Cars.

MAINTENANCE OF WAY.

8.436 miles of side tracks were built during the year, making total length of side tracks at close of year 76,303 miles.

14,055 miles of second-hand 60-pound and 67-pound rail were removed from the main line between Valdosta, Ga., and Grand Crossing, Fla., and replaced with new 70-pound rail. The entire line between those two points is now laid with 70-pound steel rail.

172,132 cross-ties and 128 sets of switch-ties were placed in the track during the year, as compared with 97,140 cross-ties and 94 sets of switch-ties for the previous year.

Several of the ties were repaired or rebuilt during the year. An electrical interlocking plant was installed jointly with the Central of Georgia Railway Company at Southwestern Junction, near Macon, Ga.

For the usual statistical tables and detailed results of operation see Auditor's report, which follows.

The Directors have to report the death on November 29, 1906, of Mr. Samuel Spencer, who was elected a Director and Vice-President of the Company on June 26, 1895. He served as Vice-President until November 6, 1895, when he was elected President, which office he held until the date of his death.

Memorial resolutions, adopted by the Board of Directors at a meeting held in Macon, Ga., on December 14, 1906, will be found on page 7 of pamphlet report.

The acknowledgments of the Board are due to all officers and employees for the faithful and efficient discharge of their duties during the year.

Respectfully submitted, by order of the Board.

W. W. FINLEY, President.

TABLE 1.—COMPARATIVE BALANCE SHEET, JUNE 30, 1907, AND JUNE 30, 1906.

ASSETS.		June 30, 1906.	June 30, 1907.
Cost of Road:		\$8,795,528 54	
Cost of Properties to June 30, 1906.....			\$8,795,528 54
Additions during the year (see page 4 of pamphlet report).....			25,890 23
Total Cost of Road June 30, 1907.....			\$8,821,418 77
Cost of Equipment:		\$18,845 71	
Cost of Equipment to June 30, 1906.....			\$18,845 71
Additions during the year (see page 4 of pamphlet report).....			126,759 26
Total Cost of Equipment to June 30, 1907.....			\$945,905 07
Total Cost of Road and Equipment.....			\$9,767,323 84
Equipment under Trust (per contra).....		\$504,000 00	\$458,693 23
Material and Supplies on hand (see Table 13 of pamphlet report).....		167,346 82	153,913 85
Rail—Leased.....		69,529 08	78,479 45
Securities Owned, in Treasury Unpledged.....		239,032 22	256,332 22
Cash Reserved to Apply on Equipment Trust, Series B.....		36,500 00	8,000 00
Sundry Accounts.....		32,357 33	37,040 49
Current Assets:			
Cash in hands of Treasurer.....		\$179,735 86	\$88,328 49
Cash in hands of Financial Agents for payment of interest and unpaid dividends.....		101,346 50	99,537 00
Cash in transit from Agents.....		42,733 76	39,454 53
Due from Agents and Conductors.....		20,191 51	47,549 11
Due from United States Postoffice Department.....		16,612 12	16,582 02
Due from Southern Express Company.....		7,000 00	8,000 00
Due from other Transportation Companies.....		6,634 97	3,784 49
Due from Individuals and Companies.....		52,133 73	76,500 06
		\$426,388 45	\$379,735 70
Capital Stock:			
Common.....		\$11,089,778 15	\$11,131,218 88
First Preferred.....			
Second Preferred.....			
Total.....			\$3,768,000 00
Funded Debt:			
First Mortgage Five Per Cent. Bonds.....		\$4,000,000 00	\$4,000,000 00
Less: Amount in Reserve for Improvements.....			\$162,000 00
Amount in Treasury of Company.....			37,000 00
		\$199,000 00	\$199,000 00
Outstanding.....		\$3,801,000 00	\$3,801,000 00
First Consolidated Mortgage Four Per Cent. Bonds.....		2,000,000 00	2,000,000 00
Total.....		\$5,801,000 00	\$5,801,000 00
Total Capital and Funded Liabilities.....		\$9,569,000 00	\$9,569,000 00
Equipment Obligations (per contra):			
Equipment Trust, Series A.....		\$234,000 00	\$198,000 00
Equipment Trust, Series B.....		270,000 00	211,000 00
Equipment Contract with Burnham, Williams & Co.....			49,693 33
Total.....		\$504,000 00	\$458,693 33
Taxes Accrued, not Due.....		\$34,417 01	\$38,554 33
Interest on Car Trust Notes Accrued, not Due.....		5,960 68	6,135 00
Reserves:			
For Maintenance of Way and Structures.....		\$35,775 55	\$25,743 95
For Maintenance of Equipment.....		32,711 51	60,957 00
		\$68,487 06	\$86,700 95
Current Liabilities:			
Interest on Bonds, due and unpaid, including amount due July 1.....		\$100,975 00	\$99,300 00
Dividends due and unpaid.....		271 50	271 00
Audited Vouchers.....		61,418 25	102,911 23
Payrolls (June).....		58,904 62	69,016 39
Wages uncollected for.....		1,909 21	1,759 34
Due other Transportation Companies.....		12,365 07	14,906 05
		\$275,943 65	\$288,160 01
Profit and Loss (see Table 3).....		671,969 75	683,970 28
		\$11,089,778 15	\$11,131,218 88

TABLE 2.—INCOME ACCOUNT FOR YEAR ENDED JUNE 30, 1907, COMPARED WITH YEAR ENDED JUNE 30, 1906.

1906.	Gross Earnings:	1907.
\$596,905 97	Passenger.....	\$688,652 09
1,051,778 70	Freight.....	1,243,532 63
66,492 00	Mail.....	66,492 00
98,447 05	Express.....	117,704 16
131,322 40	Miscellaneous.....	156,964 48
\$1,944,946 12		\$2,273,345 36
	Operating Expenses and Taxes:	
\$275,955 81	Maintenance of Way and Structures.....	\$334,107 62
392,293 39	Maintenance of Equipment.....	447,354 71
691,044 36	Conducting Transportation.....	923,392 31
88,388 69	General Expenses.....	95,072 14
71,977 67	Taxes.....	80,283 03
1,519,659 92		1,880,209 81
\$425,286 20	Net Earnings from Operation.....	\$393,135 55
18,578 71	Income from Other Sources.....	15,579 58
\$443,864 91	Total Available Income.....	\$408,715 13
	Fixed Charges:	
\$190,050 00	First Mortgage Bonds, \$3,801,000 at 5 per cent.....	\$190,050 00
80,000 00	First Consolidated Mortgage Bonds, \$2,000,000 at 4 per cent.....	80,000 00
\$270,050 00		\$270,050 00
	Interest on Equipment Obligations:	
11,205 00	Equipment Trust Notes, Series A.....	9,585 00
2,450 68	Equipment Trust Notes, Series B.....	10,121 33
	Equipment Contract with Burnham, Williams & Co.....	683 29
\$13,655 68		\$20,389 62
283,705 68		290,439 62
\$160,159 23	Balance of Income Over Charges.....	\$118,275 51
	From which Deduct:	
\$34,200 00	Dividends Nos. 17, 18, 19 and 20 (2½ per cent. each) on First Preferred Stock.....	\$34,200 00
43,360 00	Dividends Nos. 14, 15 (2 per cent. each), 16 and 17 (2½ per cent. each) on Second Preferred Stock.....	54,200 00
77,560 00		88,400 00
\$82,559 23	Balance carried to Credit of Profit and Loss for the Year.....	\$29,875 51

TABLE 3.—PROFIT AND LOSS ACCOUNT FOR YEAR ENDED JUNE 30, 1907.

Balance at Credit of this Account June 30, 1906.....	\$671,969 75
Add:	
Credit Balance of Income Account for year ended June 30, 1907.....	\$29,875 51
Less:	
Miscellaneous Debits.....	17,875 00
	12,000 51
Credit Balance June 30, 1907.....	\$683,970 26

TABLE 4.—TRAFFIC STATISTICS, YEARS ENDED JUNE 30, 1907, AND 1906.

	1907.	1906.	Percentage of Inc. or Dec.
Average number of miles operated.....	395	395	
Passenger Traffic:			
Number of passengers carried.....	721,237	627,833	Inc. 14.88
Number of passengers carried one mile.....	26,711,296	23,600,066	Inc. 13.18
Average distance hauled per passenger (miles).....	37.04	37.59	Dec. 1.46
Total revenue from passengers.....	\$688,652 09	\$596,905 97	Inc. 15.37
Average receipts per passenger per mile (cents).....	2.578	2.529	Inc. 1.94
Total passenger-train earnings.....	\$888,416 75	\$776,632 27	Inc. 14.54
Passenger-train earnings per mile of road.....	\$2,249 16	\$1,963 63	Inc. 14.54
Passenger-train earnings per train mile.....	\$0.38888	\$0.3552	Inc. 3.32
Average number of passengers in each train.....	134 66	130 15	Inc. 3.47
*Average number of passengers in each car.....	45 96	45 83	Inc. .28
Freight Traffic—Revenue Freight:			
Number of tons carried.....	990,996	869,561	Inc. 15.29
Number of tons carried one mile.....	106,249,360	86,869,039	Inc. 22.31
Average distance hauled per ton (miles).....	107 215	101 063	Inc. 6.09
Total freight-train earnings.....	\$1,243,532 63	\$1,061,778 70	Inc. 18.23
Freight receipts per ton per mile (cents).....	1 170	1 211	Dec. 3.39
Freight-train earnings per mile of road.....	\$3,148 18	\$2,662 73	Inc. 18.23
Freight-train earnings per train mile.....	\$1.05466	\$0.92820	Dec. 9.99
Average number of tons of freight in each train.....	191 87	217 72	Dec. 11.87
Average number of tons of freight in each loaded car.....	14 94	16 25	Dec. 2.06
Earnings and Expenses:			
Passenger and freight-train earnings.....	\$2,131,949 38	\$1,827,411 97	Inc. 16.66
Passenger and freight-train earnings per mile of road.....	\$5,397 34	\$4,636 26	Inc. 16.66
Gross earnings.....	\$2,273,345 36	\$1,944,946 12	Inc. 16.88
Gross earnings per mile of road.....	\$5,755 30	\$4,923 91	Inc. 16.88
Gross earnings per revenue train mile.....	\$1,511 90	\$1,525 33	Dec. .88
Operating expenses and taxes.....	\$1,890,209 81	\$1,519,659 92	Inc. 23.73
Operating expenses and taxes per mile of road.....	\$4,790 02	\$3,847 24	Inc. 23.73
Operating expenses and taxes per revenue train mile.....	\$1,250 45	\$1,191 84	Inc. 4.92
Net earnings.....	\$393,135 55	\$425,286 39	Dec. 7.56
Net earnings per mile of road.....	\$996 25	\$1,076 67	Dec. 7.56
Net earnings per revenue train mile.....	\$0.26145	\$0.33554	Dec. 21.61
Train and Engine Mileage:			
Miles run by passenger trains.....	898,406	814,298	Inc. 10.33
Miles run by freight trains.....	606,225	460,760	Inc. 31.35
Total revenue train mileage.....	1,503,631	1,275,058	Inc. 17.93
Miles run by work trains.....	32,597	32,167	Inc. 1.34
Miles run by special trains.....	8,902	9,387	Dec. 8.36
Total train mileage.....	1,545,130	1,316,612	Inc. 17.33
Miles run by light engines.....	7,259	4,871	Inc. 49.02
Miles run by switching engines.....	348,902	371,199	Inc. 5.31
Total engine mileage.....	1,900,891	1,652,682	Inc. 15.02
Car Statistics:			
Mileage of loaded freight cars.....	7,773,662	6,531,705	Inc. 18.11
Mileage of empty freight cars.....	2,330,627	2,124,888	Inc. 9.58
Mileage of caboose cars.....	604,536	460,760	Inc. 31.20
Total mileage of freight-train cars.....	10,708,825	9,169,353	Inc. 16.79
Mileage of passenger cars.....	2,653,222	2,373,196	Inc. 11.90
Mileage of baggage, mail and express cars.....	1,614,080	1,519,076	Inc. 6.25
Total mileage of passenger-train cars.....	4,267,302	3,892,271	Inc. 9.64
Mileage of work-train cars.....	146,436	130,898	Inc. 21.02
Average number of loaded cars in each freight train.....	12 84	14 28	Dec. 10.08
Average number of empty cars in each freight train.....	4 85	6 62	Dec. 13.70
Average number of cars in each freight train.....	17 69	19 90	Dec. 11.10
Percentage of loaded cars in each freight train.....	72 58	71 76	Inc. 1.14
Average number of passenger cars in each train.....	3 95	2 91	Inc. 1.37
Average number of baggage, mail and express cars in each train.....	1 80	1 87	Dec. 3.74
Average number of cars in each passenger train.....	4 78	4 78	Dec. .03
*Excludes dining, cafe and special car mileage.			
†Includes dining, cafe and special car mileage.			
‡Includes caboose cars.			

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., October 23.

In the Baltimore stock market during the past week prices fluctuated in sympathy with New York, but at the end of the period declines in speculative issues were generally reported.

The trading showed sales of United Railways common from 10¼ to 9¾; do. trust certificates at nearly the same prices; do. incomes from 48 to 45; the funding 5s from 75½ to 74; funding scrip, 75; United 4s, 82¼ to 81; Gas 6s, 102¾ to 103; Seaboard 4s, 65¼ to 64¼; do. 10-year 5s, 94½; G.-B.-S. incomes, 17 to 18; do. firsts, 43¾.

Bank stock sold as follows: Merchants', 171; Farmers and Merchants', 50; First National, 130; Western, 35; Citizens', 33½; Mechanics', 26; Marine, 38; Commerce, 27.

Other securities were traded in thus: Northern Central Railway, 84 to 82; do. fractions, 87; Western Maryland Railroad stock, 4¾ to 4½; Atlantic Coast Line 4s, 87½ to 87¼; Anacostia & Potomac 5s, 98 to 97¼; Georgia, Carolina & Northern 5s, 99½ to 99¼; Georgia Southern & Florida 5s, 104 to 102½; Norfolk Railway & Light 5s, 92 to 93; Southern Railway 5s, 99½ to 102¾; Merchants & Miners' Transportation Co., trust certificates, 82; Georgia & Alabama Consolidated 5s, 99½ to 98¾; Western Maryland 4s, 68; West Virginia Central 6s, 102; Alabama Consolidated Coal & Iron preferred, 74; City & Suburban 5s, Baltimore, 106¾ to 106½; Richmond & Danville debenture 5s, 100½; Raleigh & Augusta 6s, 113; Seaboard & Roanoke 5s, 102¾; Baltimore City 3½s, 1936, 91; do. do. 1940, 91; Carolina Central 4s, 82½; Norfolk Street Railway 5s, 102¾; Charlotte, Columbia & Augusta 2d 7s, 102½; Lexington Railway 5s, 96½ to 96; City & Suburban (Washington) 5s, 99.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended October 23, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	70	70
Atlantic Coast of Connecticut.....	100	250	250
Georgia South. & Fla. 1st Pfd.....	100	97	97
Seaboard Company Common.....	100	94 11½	94 11½
United Railways & Elec. Co.....	50	94 10	94 10
Western Maryland.....	4	100	100

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	32	32
Farmers & Merch. Nat. Bank.....	40	50	50
German Bank.....	100	106	106
Maryland National Bank.....	20	10	10
Merchants' National Bank.....	100	172	172
National Bank of Baltimore.....	100	112	112
National Howard Bank.....	10	12	12
National Marine Bank.....	30	37½	38
National Mechanics' Bank.....	10	25½	27
National Union Bank of Md.....	100	115	115
Third National Bank.....	100	110	110

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Co.....	25	52	52
Fidelity & Deposit.....	50	115	120
International Trust.....	100	140	140
Maryland Casualty.....	25	58½	58½

Miscellaneous Stocks.	Par.	Bid.	Asked.
Con. Gas, Elec. Lt. & P. Com.....	23¾	23¾	23¾
Consolidation Coal.....	100	88	88
G.-B.-S. Brewing Co.....	100	3½	4
Mer. & Miners' Trans. Co.....	100	80	85

Railroad Bonds.	Par.	Bid.	Asked.
Atlantic Coast Line 1st 4s, 1952.....	85	85¼	85¼
Atlantic Coast Line (Conn.) 5s.....	100	100	100
Baltimore & Harrisburg 5s, 1936.....	100	87	87
Carolina Central 4s, 1948.....	82	83	83
Charleston & West. Car. 5s, 1946.....	100	103½	103½
Char. Col. & Aug. 2d 7s, 1910.....	108	108½	108½
Columbia & Greenville 1st 6s, 1916.....	108½	108½	108½
Georgia & Alabama 5s, 1945.....	99¼	99¼	99¼
Georgia, Car. & North. 1st 5s, 1929.....	99	100	100
Georgia Pacific 1st 6s, 1922.....	110	110	110
Georgia South. & Fla. 1st 5s, 1945.....	101	103	103
Petersburg, Class B 6s, 1928.....	116	116	116
Seaboard Air Line 4s, 1950.....	64¾	64¾	64¾
Seaboard Air Line 5s, 10-year, 1911.....	102	94½	94½
Seaboard & Roanoke 5s, 1926.....	102	98	98
South Bound 5s, 1941.....	98	98	98
Southern Railway Co. 5s, 1994.....	93	96¾	96¾
Virginia Midland 3d 6s, 1916.....	106	106	106
Washington Terminal 3½s.....	85	85	85
Western Maryland 4s, 1952.....	65	67	67
West Virginia Cent. 1st 6s, 1911.....	101	103	103
Wilmington, Col. & Aug. 6s, 1910.....	102	102	102

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s, 1949.....	97	97	97
Baltimore City Pass. 5s, 1911.....	102	102	102
Central Ry. Co. 5s (Balt.), 1932.....	108	108	108
Central Ry. Ext. 5s (Balt.), 1932.....	107	107	107
Charleston Con. Elec. 5s, 1939.....	90	90	90
City & Suburban 5s (Balt.), 1922.....	106¾	107¼	107¼
City & Suburban 5s (Wash.), 1948.....	98½	99	99
Knoxville Traction 1st 5s, 1928.....	101	101	101
Lake Roland Elevated 5s, 1942.....	108½	108½	108½
Lexington Railway 1st 5s, 1949.....	98	98	98
Macon Ry. & Lt. 1st Con 5s, 1953.....	92	92	92
Metropolitan 5s (Wash.), 1925.....	107	107	107

Norfolk Railway & Light 5s.....	98	102¾	102¾
Norfolk Street Railway 5s, 1944.....	102	102¾	102¾
United Railways 1st 4s, 1949.....	81	81½	81½
United Railways Inc. 4s, 1949.....	44	45	45
United Railways Funding 5s.....	44	74½	74½

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending October 21.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	91	91
Aiken Mfg. Co. (S. C.).....	91	91
American Spinning Co. (S. C.).....	130	145
Anderson Cotton Mills (S. C.).....	74	75
Arkwright Mills (S. C.).....	121	128
Augusta Factory (Ga.).....	80	80
Avondale Mills (Ala.).....	125	125
Belton Mills (S. C.).....	125	126
Bibb Mfg. Co. (Ga.).....	112½	112½
Brandon Mills (S. C.).....	135	138
Cabarrus Cotton Mills (N. C.).....	127	128
Chadwick Mfg. Co. (N. C.) Pfd.....	97	97
Chiquola Mfg. Co. (S. C.).....	115	120
Clifton Mfg. Co. (S. C.).....	115	117
Clifton Mfg. Co. (S. C.) Pfd.....	101	101
Clinton Cotton Mills (S. C.).....	147	147
Columbus Mfg. Co. (Ga.).....	96	101
Courtenay Mfg. Co. (S. C.).....	96	100
Dallas Mfg. Co. (Ala.).....	95	100
Darlington Mfg. Co. (S. C.).....	80	82
Eagle & Phenix Mills (Ga.).....	127	127½
Easley Cotton Mills (S. C.).....	145	145
Enoree Mfg. Co. (S. C.).....	70	80
Enoree Mfg. Co. (S. C.) Pfd.....	99	100
Enterprise Mfg. Co. (Ga.).....	90	94
Exposition Cotton Mills (Ga.).....	225	240
Gaffney Mfg. Co. (S. C.).....	92	93
Gainesville Cotton Mills (Ga.).....	59	63
Granby Cot. Mills (S. C.) 1st Pfd.....	47½	47½
Graniteville Mfg. Co. (S. C.).....	159	170
Greenwood Cotton Mills (S. C.).....	97	96½
Grendel Mills (S. C.).....	120	120
Henrietta Mills (N. C.).....	161	176
King Mfg. Co., John P. (Ga.).....	97	100
Lancaster Cotton Mills (S. C.).....	110	110
Langley Mfg. Co. (S. C.).....	91	96
Laurens Cotton Mills (S. C.).....	140	160
Limestone Mills (S. C.).....	140	140
Lockhart Mills (S. C.).....	92	96
Lockhart Mills (S. C.) Pfd.....	97	100
Louise Mills (N. C.).....	90	96
Marlboro Cotton Mills (S. C.).....	89	91
Mayo Mills (S. C.).....	186	186
Mills Mfg. Co. (S. C.).....	101	101
Mills Mfg. Co. (S. C.) Pfd.....	101	101
Monaghan Mills (S. C.).....	115	115
Monarch Mills (S. C.).....	107	112
Newberry Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	120	123
Olympia Cot. Mills (S. C.) 1st Pfd.....	65	71
Orangeburg Mfg. Co. (S. C.) Pfd.....	90	97
Orr Cotton Mills (S. C.).....	109	115
Pacolet Mfg. Co. (S. C.).....	176	176
Pacolet Mfg. Co. (S. C.) Pfd.....	102½	103
Pelzer Mfg. Co. (S. C.).....	95	105
Piedmont Mfg. Co. (S. C.).....	106	176
Poe Mfg. Co., F. W. (S. C.).....	130	135
Raleigh Cotton Mills (N. C.).....	100	105
Richland Cot. Mills (S. C.) Pfd.....	65	65
Roanoke Mills (N. C.).....	140	165
Saxon Mills (S. C.).....	125	125
Sibley Mfg. Co. (Ga.).....	63	65
Spartan Mills (S. C.).....	83	85
Springstein Mills (S. C.).....	100	100
Trion Mfg. Co. (Ga.).....	137½	137½
Tucapau Mills (S. C.).....	195	200
Union-Buffalo Mills (S. C.) 1st Pfd.....	70	72½
Victor Mfg. Co. (S. C.).....	133½	135
Warren Mfg. Co. (S. C.).....	92	93½
Warren Mfg. Co. (S. C.) Pfd.....	103	103
Washington Mills (Va.).....	30	40
Washington Mills (Va.) Pfd.....	100	115
Whitney Mfg. Co. (S. C.).....	145	150
Wiscasset Mills (N. C.).....	127	135
Woodruff Cotton Mills (S. C.).....	127	135

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending October 21.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	90	93
Aetna Cotton Mills (S. C.) Pfd.....	80	80
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	127	127
Anderson Cotton Mills (S. C.).....	80	80
Arcadia Mills (S. C.).....	101	101
Arkwright Cotton Mills (S. C.).....	109	109
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	122	122
Bibb Mfg. Co. (Ga.).....	115	115
Brandon Mills (S. C.).....	130	130
Brogan Mills (S. C.).....	67	63
Cabarrus Cotton Mills (N. C.).....	125	125
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	112	112
Clifton Mfg. Co. (S. C.).....	112	112
Clifton Mfg. Co. (S. C.) Pfd.....	101	101
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	97
Courtenay Mfg. Co. (S. C.).....	100	100
Dallas Mfg. Co. (S. C.).....	95	100
Darlington Mfg. Co. (S. C.).....	80	85
D. E. Converse Co. (S. C.).....	112	112
Eagle & Phenix Mills (Ga.).....	130	135
Easley Cotton Mills (S. C.).....	130	136
Enoree Mfg. Co. (S. C.).....	70	82
Enoree Mfg. Co. (S. C.) Pfd.....	100	102
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	225	225
Gaffney Mfg. Co. (S. C.).....	92	93
Gainesville Cotton Mills (Ga.).....	57	63
Glenwood Mills (S. C.) Cotton.....	122	122
Gluck Mills (S. C.).....	94	98
Granby Cot. Mills (S. C.) 1st Pfd.....	50	50
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	94	98
Grendel Mills (S. C.).....	117	117
Hartsville Cotton Mill (S. C.).....	122	125
Henrietta Mills (N. C.).....	165	165
Inman Mills (S. C.).....	100	102
King Mfg. Co., J. P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	102	110
Lancaster Cot. Mills (S. C.) Pfd.....	92	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	150	162
Limestone Mills (S. C.).....	140	150
Lockhart Mills (S. C.) Pfd.....	90	97
Loray Cotton Mills (N. C.) Pfd.....	90	100

Louise Mills (N. C.).....	90	96
Louise Mills (N. C.) Pfd.....	102	102
Marlboro Cotton Mills (S. C.).....	90	90
Mayo Mills (N. C.).....	150	200
Mills Mfg. Co. (S. C.).....	109	109
Molloy Mfg. Co. (S. C.).....	103	103
Monaghan Mills (S. C.).....	117	117
Monarch Cotton Mills (S. C.).....	108	110
Newberry Cotton Mills (S. C.).....	127	127
Ninety-Six Cotton Mills (S. C.).....	115	115
Norris Cotton Mills (S. C.).....	90	90
Odell Mfg. Co. (N. C.).....	122	122
Olympia Cotton Mills (S. C.).....	70	80
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	80
Orr Cotton Mills (S. C.).....	108	108
Pacolet Mfg. Co. (S. C.).....	170	180
Pacolet Mfg. Co. (S. C.) Pfd.....	101	104
Pelzer Mfg. Co. (S. C.).....	147	175
Piedmont Mfg. Co. (S. C.).....	170	170
Poe Mfg. Co., F. W. (S. C.).....	125	130
Raleigh Cotton Mills (N. C.).....	100	100
Richland Cot. Mills (S. C.) Pfd.....	50	50
Roanoke Mills (N. C.).....	118	118
Saxon Mills (S. C.).....	124	128
Sibley Mfg. Co. (Ga.).....	58	63
Southern Cotton Mills (N. C.).....	150	150
Spartan Mills (S. C.).....	145	150
Springstein Mills (S. C.).....	100	100
Trion Mfg. Co. (Ga.).....	132	140
Tucapau Mills (S. C.).....	200	200
Union-Buffalo 1st Pfd.....	70	75
Union-Buffalo 2d Pfd.....	20	27
Victor Mfg. Co. (S. C.).....	130	130
Warren Mfg. Co. (S. C.).....	90	97
Warren Mfg. Co. (S. C.) Pfd.....	106	107
Washington Mills (S. C.).....	100	100
Washington Mills (Va.) Pfd.....	100	105
Whitney Mfg. Co. (S. C.).....	150	150
Wiscasset Mills (N. C.).....	127	127
Woodruff Cotton Mills (S. C.).....	132	135

New Corporations.

The Sparta Savings Bank at Sparta, Ga., is reported being organized with \$25,000 capital.

The Farmers' State Bank of Marshall, O. T., has been chartered with \$10,000 capital by W. L. Holton, J. L. and H. D. Hoern.

The Temple Abstract Co. of Temple, Texas, has been incorporated with \$10,000 capital by A. L. Brown, N. A. Sayre and Charles S. Tirado.

The Largo Bank is reported to have begun business at Largo, Fla., with \$15,000 capital. D. C. McMullen is president and Burton Belcher cashier.

The Oconee Bank at Westminster, S. C., has been granted a commission; capital \$25,000. H. E. Rossier and D. B. Butler are among the incorporators.

The First State Bank of Chandler, Texas, has been approved; capital \$10,000. The incorporators are E. L. Green, H. L. Spikes, J. B. Wofford and others.

The Bank of Arabi at Arabi, Ga., has been chartered with \$25,000 capital. The incorporators are W. L. Brown, G. C. McKenzie, W. J. O'Dunn and others.

The First State Bank of Kirkland, Texas, has been incorporated with \$10,000 capital by J. H. P. Jones, R. H. Norris, J. M. Wilder, M. S. Walling and others.

The Bank of Crossland at Crossland, Ga., has been granted a charter; capital \$25,000. The incorporators are G. F. Clark, J. C. Canady, J. F. Royal and others.

The San Jacinto State Bank of Cold Springs, Texas, has been incorporated with \$10,000 capital by T. H. Ness, I. M. Kempner, T. Robinson, P. E. McMahon and others.

The Farmers' National Bank of Weatherford, O. T., capital \$25,000, has been approved. The organizers are J. L. Daniel, E. O. Shidler, C. E. Casper, R. J. Lewis, J. S. Wilks.

The Bank of Pageland has been chartered at Pageland, S. C., with \$15,000 capital. W. S. Blakeney is president; R. H. Blakeney, vice-president, and L. L. Parker, cashier.

The Centerville Mercantile Co. at Centerville, Ark., has been incorporated with \$5000 capital by L. R. McCarty, J. B. Brownover, Joe L. Davis, Louis Cook and Fred H. Phillips.

The First National Bank of Blackwell, Texas, has been approved; capital \$25,000. The organizers are J. V. Holmes, E. Q. Daniels, G. E. Bradford, F. L. Hopkins and E. L. Frost.

The Georgia Brokerage & Insurance Co. of Tifton, Ga., has made application for a charter; capital \$10,000. The incorporators are J. R. Forrester, Jr., D. H. Fain and J. L. Brooks.

The Bank of Naylor at Naylor, Ga., has been organized with \$25,000 capital

